

FIG. 1a

nucleotide-binding

loop

 $\alpha$ B $\beta$ 1 $\beta$ 2

VEGF - R2 806 MDPDELPLDEHCERLPYDASKWEFPRDLRLKLGKPLGRGAGQVEADAFGIDKDTATCR-- 863  
 FGFR1 456 ---MLAGSEY--ELP-EDPRWELPRDLVLGKPLGEGCGQVLAELGLDKDKPNRVT 509  
 IRK 978 ---VFPCSVVPDEWEVSREK1TLRLQGSGFGWEGNARDIKGEAE--T 1025  
 VEGF - R1 799 MDPDEVPLDEQCERLPYDASKWEFARERLKLGLSLGRGAFGKQASAFGLKKSPTCR-- 856  
 PDGFR $\alpha$  576 -----DPMQLPYD-SHWEFPRDGLVLGRVLCGSAFGKVEGTAYGLRSRQPMV-- 622

 $\alpha$ C $\beta$ 4 $\beta$ 5

VEGF - R2 864 TVAVKMLKEGATHSEHRALMSELKILIHGHILNVNLLGACTKPGGLMVIVEFCCKFGN 923  
 FGFR1 510 KVAVKMLKSDATEKDLSDLISEMWMKMGKHNIINLLGACT-ODGPLYVIVEYASKGN 568  
 IRK 1026 RVAVKTVNESASLRERI EFLNEASVMKGFTCH-HVYRLGVVSK-GQPTLVVMELMAHGD 1083  
 VEGF - R1 857 TVAVKMLKEGATASEYKALMTELKILTHIGHILNVNLLGACTKQGGPLMVIVEYCKYGN 916  
 PDGFR $\alpha$  623 KVAVKMLKPTARSSEKQALMSELKILMTHLGHILNVNLLGACTK-SGPIYIIVEYCFYGD 681

 $\alpha$ D

kinase insert domain

VEGF - R2 924 LSTYLRKRNVEVPYKTKGARFRQGDYVG----- 953  
 FGFR1 569 LREYLQARRPPGLEYCYN----- 586  
 IRK 1084 LKSYLRSLRPEA----- 1095  
 VEGF - R1 917 LSNYLKSKRDLEFLNKDAALHMEPKKEKME----- 946  
 PDGFR $\alpha$  682 LVNLYLHKNRDSFLSHHPEKPKKELDIFGLNPADSTRSYVILSFENNGDYMDMKQADTTQ 741

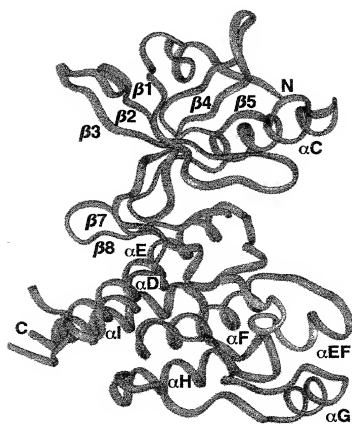
 $\alpha$ E

VEGF - R2 954 ---AIPVDLKRRLDSITSSQSSASGGFVEEKSLSDVEEEAAPEDLYKDFLTLEHLICYSF 1010  
 FGFR1 587 -----PSHNPEEQLSKDLVSCAY 605  
 IRK 1096 -----ENNGRPPPTLQEMIQMAA 1114  
 VEGF - R1 947 --PGLEQGGKPRLDVTSSEFSASGGFQEDKSLSDVEEEEDSDGFYKEPIIMEDLISYSF 1004  
 PDGFR $\alpha$  742 YPWMLERKEVSKYSDIQRSLYDRASYKK-KSMLDSEVKNLLSDDNSEGLTLLDLLSFTY 800

FIG. 1b

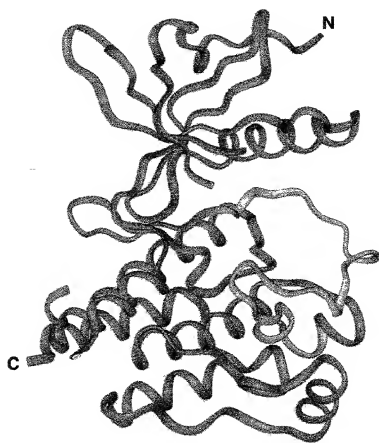
		catalytic loop	$\beta 7$	$\beta 8$	activation loop		
VEGF - R2	1011	QVAKGMEFDLASKKC	IHRDLAARN	ILLSEKNVVKICD	FGLARDI	YKDPDYVRKGDARLP	1070
FGFR1	606	QVARGMEYSLASKKC	IHRDLAARN	VLTEDNVMKIAD	FGLARDI	HHIDYYKTNGRLP	665
IRK	1115	EIADGMEY-LNAK	KFVHRDLAARN	CNVAHDFTVKIGD	FGLMTRDI	YETDYYRKGKGLLP	1174
VEGF - R1	1005	QVARGMEFDLSRKC	IHRDLAARN	ILLSENNVVKID	FGLARDI	YKNPDYVRKGDTRLP	1064
PDGFR $\alpha$	801	QVARGMEF-LASKKC	IHRDLAARN	VLLAQGKIVKID	FGLARDI	MHDSNVYSKGSTFLP	860
		$\alpha$ EF				$\alpha$ G	
VEGF - R2	1071	WMAPEITFDRVYTI	IQSDVWSFGVLL	WEIFSLGAS	PYPGVK	IDEEFCRRLLKEG	923
FGFR1	666	WMAPEALFDR	IYTHQSDVWS	FGVLLWEIFTL	GGSPYGPVPEELF	-KLLKEGHRMDRKP	568
IRK	1175	WMAPESLKDG	VFTSSDMWSFGW	WEITSLAEQ	PYQGLSNEQV	-KFVMDGGYLD	1083
VEGF - R1	1065	WMAPESTFDK	IYSTKSDVWS	YGVLLWEIFSL	GGSPYGPVQVMD	DEFCRRLREGMR	916
PDGFR $\alpha$	861	WMAPESTFDN	LYTTLSDVWS	YSGILLWEIFSL	GGTTPYGM	VMVDSTFYNKIKSGY	681
		$\alpha$ H				$\alpha$ I	
VEGF - R2	1131	TTPEMYQ	TMLDCW	HGEP	SORPTFSEL	VEHLGNLLQANA	1171
FGFR1	725	CTNELYMM	MRDCWH	AVPSOR	PTFKQLVED	LDRIVALTSNQE	765
IRK	1234	CPERVTD	LMRM	CWQFN	PMRPTLEIVN	LLKDDLHPSF	1274
VEGF - R1	1125	STPEI	IYQIML	DCWHRD	PKERPRFAEL	VEKLGDLQANV	1165
PDGFR $\alpha$	921	ATSEVYE	IMVKCWN	SEPEK	RPSFYHLS	IVENLLPGQY	961

FIG. 2a



VEGFR2D50P

FIG. 2b



FGFR1

09939872.1.1301



FIG. 2c



0939832.1.1301

FIG. 3a

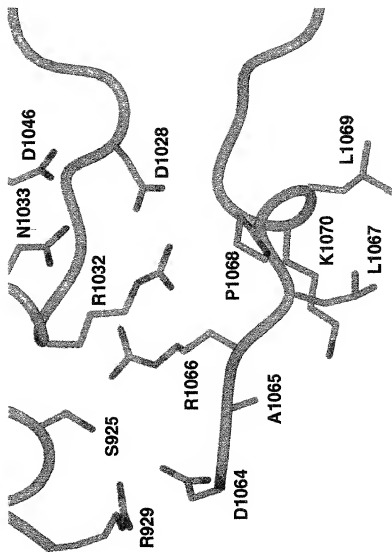


FIG. 3b

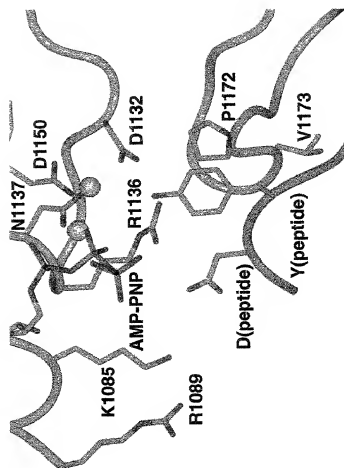


FIG. 4

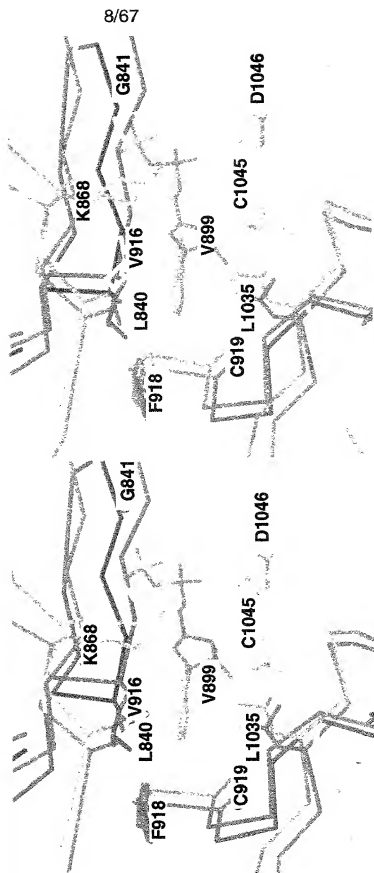


FIG. 5

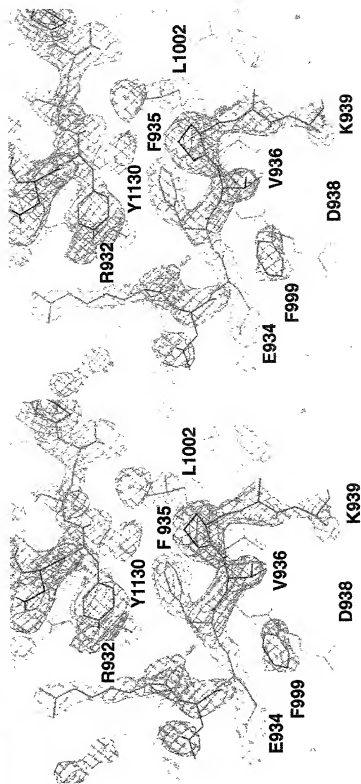


FIG. 6

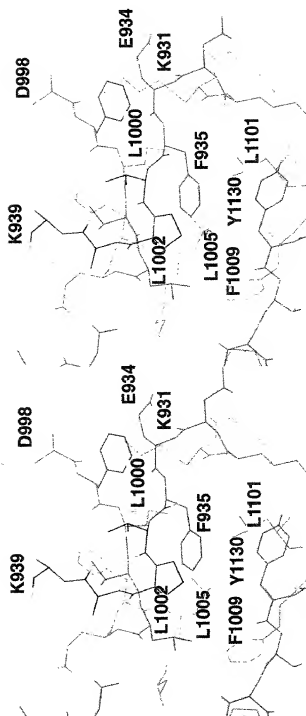


FIG. 7(1)

ATOM	1	CB	LEU	820	49.908	45.905	17.938	1.00	48.95
ATOM	2	CG	LEU	820	50.568	45.069	16.833	1.00	43.57
ATOM	3	CD1	LEU	820	50.004	45.358	15.456	1.00	43.59
ATOM	4	CD2	LEU	820	52.066	45.345	16.886	1.00	47.45
ATOM	5	C	LEU	820	49.216	48.321	17.530	1.00	48.14
ATOM	6	O	LEU	820	48.196	48.587	18.187	1.00	52.58
ATOM	9	N	LEU	820	50.481	47.725	19.581	1.00	53.68
ATOM	11	CA	LEU	820	50.302	47.387	18.117	1.00	50.63
ATOM	12	N	PRO	821	49.435	48.842	16.306	1.00	41.32
ATOM	13	CD	PRO	821	50.680	48.870	15.520	1.00	45.54
ATOM	14	CA	PRO	821	48.465	49.733	15.700	1.00	31.06
ATOM	15	CB	PRO	821	49.067	49.985	14.352	1.00	28.89
ATOM	16	CG	PRO	821	50.509	50.148	14.734	1.00	43.44
ATOM	17	C	PRO	821	47.123	49.165	15.569	1.00	26.14
ATOM	18	O	PRO	821	46.948	47.970	15.374	1.00	26.03
ATOM	19	N	TYR	822	46.154	50.024	15.776	1.00	16.25
ATOM	21	CA	TYR	822	44.799	49.643	15.582	1.00	18.88
ATOM	22	CB	TYR	822	44.061	49.519	16.916	1.00	17.42
ATOM	23	CG	TYR	822	42.584	49.316	16.728	1.00	18.46
ATOM	24	CD1	TYR	822	41.674	50.341	17.047	1.00	21.12
ATOM	25	CE1	TYR	822	40.314	50.206	16.812	1.00	13.80
ATOM	26	CD2	TYR	822	42.086	48.144	16.175	1.00	12.24
ATOM	27	CE2	TYR	822	40.714	47.997	15.951	1.00	13.44
ATOM	28	CZ	TYR	822	39.838	49.028	16.268	1.00	14.38
ATOM	29	OH	TYR	822	38.480	48.887	16.073	1.00	19.73
ATOM	31	C	TYR	822	44.253	50.760	14.705	1.00	16.93
ATOM	32	O	TYR	822	44.172	51.904	15.112	1.00	20.70
ATOM	33	N	ASP	823	44.054	50.456	13.439	1.00	15.20
ATOM	35	CA	ASP	823	43.509	51.418	12.506	1.00	13.55
ATOM	36	CB	ASP	823	43.856	50.945	11.091	1.00	11.37
ATOM	37	CG	ASP	823	43.456	51.933	10.016	1.00	16.45
ATOM	38	OD1	ASP	823	42.546	52.754	10.258	1.00	21.86
ATOM	39	OD2	ASP	823	44.022	51.854	8.904	1.00	12.33
ATOM	40	C	ASP	823	41.983	51.489	12.738	1.00	14.14
ATOM	41	O	ASP	823	41.224	50.722	12.172	1.00	19.73
ATOM	42	N	ALA	824	41.539	52.415	13.572	1.00	11.88
ATOM	44	CA	ALA	824	40.126	52.554	13.876	1.00	14.80
ATOM	45	CB	ALA	824	39.928	53.610	14.973	1.00	12.02
ATOM	46	C	ALA	824	39.259	52.893	12.658	1.00	19.09
ATOM	47	O	ALA	824	38.062	52.610	12.641	1.00	23.54

00369827-111301





## FIG. 7(3)

ATOM	100	CD1 PHE	829	30.020	48.484	12.363	1.00	21.31
ATOM	101	CD2 PHE	829	29.415	47.612	14.516	1.00	23.04
ATOM	102	CE1 PHE	829	28.712	48.254	11.921	1.00	18.76
ATOM	103	CE2 PHE	829	28.093	47.375	14.071	1.00	15.20
ATOM	104	CZ PHE	829	27.750	47.692	12.792	1.00	17.17
ATOM	105	C PHE	829	31.310	50.495	15.533	1.00	14.65
ATOM	106	O PHE	829	31.574	50.211	16.686	1.00	16.15
ATOM	107	N PRO	830	30.270	51.298	15.224	1.00	13.29
ATOM	108	CD PRO	830	29.707	51.633	13.901	1.00	11.63
ATOM	109	CA PRO	830	29.481	51.918	16.292	1.00	14.76
ATOM	110	CB PRO	830	28.636	52.948	15.565	1.00	13.82
ATOM	111	CG PRO	830	28.414	52.364	14.252	1.00	14.42
ATOM	112	C PRO	830	28.629	51.005	17.098	1.00	19.79
ATOM	113	O PRO	830	27.750	50.339	16.562	1.00	26.60
ATOM	114	N ARG	831	28.830	51.060	18.410	1.00	18.39
ATOM	116	CA ARG	831	28.085	50.246	19.335	1.00	14.56
ATOM	117	CB ARG	831	28.469	50.580	20.743	1.00	11.53
ATOM	118	CG ARG	831	29.808	50.050	21.092	1.00	12.65
ATOM	119	CD ARG	831	30.117	50.265	22.554	1.00	12.46
ATOM	120	NE ARG	831	31.261	51.148	22.584	1.00	20.55
ATOM	122	CZ ARG	831	32.469	50.756	22.885	1.00	12.04
ATOM	123	NH1 ARG	831	32.688	49.518	23.234	1.00	23.80
ATOM	126	NH2 ARG	831	33.467	51.501	22.526	1.00	23.84
ATOM	129	C ARG	831	26.625	50.415	19.174	1.00	18.55
ATOM	130	O ARG	831	25.852	49.561	19.607	1.00	25.61
ATOM	131	N ASP	832	26.221	51.517	18.552	1.00	25.32
ATOM	133	CA ASP	832	24.794	51.734	18.354	1.00	29.47
ATOM	134	CB ASP	832	24.393	53.230	18.408	1.00	34.15
ATOM	135	CG ASP	832	24.817	54.036	17.174	1.00	33.50
ATOM	136	OD1 ASP	832	25.519	53.528	16.280	1.00	34.09
ATOM	137	OD2 ASP	832	24.422	55.216	17.110	1.00	41.48
ATOM	138	C ASP	832	24.230	51.000	17.139	1.00	27.13
ATOM	139	O ASP	832	23.023	50.905	16.991	1.00	28.08
ATOM	140	N ARG	833	25.104	50.466	16.290	1.00	24.18
ATOM	142	CA ARG	833	24.684	49.695	15.134	1.00	19.93
ATOM	143	CB ARG	833	25.661	49.902	14.011	1.00	25.94
ATOM	144	CG ARG	833	25.313	51.073	13.158	1.00	38.97
ATOM	145	CD ARG	833	25.929	50.901	11.766	1.00	53.19
ATOM	146	NE ARG	833	25.525	51.930	10.807	1.00	63.47
ATOM	148	CZ ARG	833	25.419	53.229	11.087	1.00	70.42
ATOM	149	NH1 ARG	833	25.040	54.080	10.139	1.00	74.08
ATOM	152	NH2 ARG	833	25.695	53.690	12.306	1.00	72.08
ATOM	155	C ARG	833	24.656	48.218	15.498	1.00	18.62

09939837.11301

FIG. 7(4)

ATOM	156	O	ARG	833	24.289	47.370	14.690	1.00	18.27
ATOM	157	N	LEU	834	25.013	47.943	16.747	1.00	18.35
ATOM	159	CA	LEU	834	25.089	46.600	17.329	1.00	22.59
ATOM	160	CB	LEU	834	26.488	46.398	17.946	1.00	25.91
ATOM	161	CG	LEU	834	27.073	45.003	18.139	1.00	24.64
ATOM	162	CD1	LEU	834	27.185	44.327	16.805	1.00	21.77
ATOM	163	CD2	LEU	834	28.428	45.085	18.785	1.00	17.43
ATOM	164	C	LEU	834	23.988	46.326	18.387	1.00	24.7
ATOM	165	O	LEU	834	23.886	46.973	19.433	1.00	24.03
ATOM	166	N	LYS	835	23.173	45.335	18.087	1.00	28.94
ATOM	168	CA	LYS	835	22.072	44.942	18.940	1.00	32.84
ATOM	169	CB	LYS	835	20.794	44.913	18.081	1.00	31.34
ATOM	170	CG	LYS	835	19.529	44.697	18.839	1.00	36.63
ATOM	171	CD	LYS	835	18.359	44.407	17.940	1.00	39.31
ATOM	172	CE	LYS	835	17.074	44.414	18.783	1.00	48.99
ATOM	173	NZ	LYS	835	17.074	43.448	19.950	1.00	48.86
ATOM	177	C	LYS	835	22.431	43.532	19.420	1.00	31.79
ATOM	178	O	LYS	835	22.408	42.609	18.616	1.00	34.57
ATOM	179	N	LEU	836	22.854	43.395	20.680	1.00	33.17
ATOM	181	CA	LEU	836	23.229	42.101	21.277	1.00	34.01
ATOM	182	CB	LEU	836	23.970	42.292	22.593	1.00	33.96
ATOM	183	CG	LEU	836	25.400	42.796	22.462	1.00	42.50
ATOM	184	CD1	LEU	836	26.082	42.858	23.854	1.00	41.15
ATOM	185	CD2	LEU	836	26.153	41.860	21.501	1.00	40.93
ATOM	186	C	LEU	836	22.053	41.181	21.547	1.00	33.27
ATOM	187	O	LEU	836	21.017	41.631	22.025	1.00	31.15
ATOM	188	N	GLY	837	22.268	39.882	21.330	1.00	36.34
ATOM	190	CA	GLY	837	21.228	38.881	21.536	1.00	34.95
ATOM	191	C	GLY	837	21.603	37.761	22.497	1.00	35.64
ATOM	192	O	GLY	837	22.203	37.980	23.554	1.00	39.23
ATOM	193	N	LYS	838	21.254	36.541	22.126	1.00	35.31
ATOM	195	CA	LYS	838	21.531	35.375	22.962	1.00	37.86
ATOM	196	CB	LYS	838	20.647	34.192	22.539	1.00	41.52
ATOM	197	C	LYS	838	22.991	34.935	22.989	1.00	35.93
ATOM	198	O	LYS	838	23.650	34.851	21.946	1.00	34.37
ATOM	199	N	PRO	839	23.499	34.608	24.187	1.00	33.68
ATOM	200	CD	PRO	839	22.820	34.757	25.486	1.00	34.48
ATOM	201	CA	PRO	839	24.880	34.158	24.363	1.00	37.11
ATOM	202	CB	PRO	839	24.927	33.750	25.833	1.00	37.46
ATOM	203	CG	PRO	839	23.970	34.710	26.472	1.00	37.04
ATOM	204	C	PRO	839	25.148	32.963	23.474	1.00	39.09
ATOM	205	O	PRO	839	24.303	32.085	23.327	1.00	38.13
ATOM	206	N	LEU	840	26.261	33.013	22.767	1.00	43.03

ATOM	208	CA	LEU	840	26.646	31.915	21.917	1.00	47.73
ATOM	209	CB	LEU	840	27.396	32.426	20.692	1.00	41.83
ATOM	210	CG	LEU	840	26.386	32.957	19.697	1.00	39.60
ATOM	211	CD1	LEU	840	27.080	33.697	18.595	1.00	42.69
ATOM	212	CD2	LEU	840	25.582	31.795	19.156	1.00	38.40
ATOM	213	C	LEU	840	27.523	30.987	22.747	1.00	54.84
ATOM	214	O	LEU	840	27.479	29.768	22.577	1.00	59.76
ATOM	215	N	GLY	841	28.248	31.563	23.706	1.00	60.55
ATOM	217	CA	GLY	841	29.140	30.781	24.547	1.00	60.96
ATOM	218	C	GLY	841	29.660	31.544	25.750	1.00	63.95
ATOM	219	O	GLY	841	29.497	32.764	25.857	1.00	64.35
ATOM	220	N	ARG	842	30.279	30.809	26.668	1.00	65.26
ATOM	222	CA	ARG	842	30.823	31.388	27.887	1.00	65.12
ATOM	223	CB	ARG	842	30.027	30.897	29.091	1.00	61.50
ATOM	224	C	ARG	842	32.300	30.995	28.004	1.00	64.23
ATOM	225	O	ARG	842	32.957	30.720	26.986	1.00	68.80
ATOM	226	N	GLY	843	32.822	31.003	29.226	1.00	60.14
ATOM	228	CA	GLY	843	34.206	30.639	29.453	1.00	60.53
ATOM	229	C	GLY	843	34.676	31.165	30.789	1.00	62.56
ATOM	230	O	GLY	843	33.902	31.764	31.535	1.00	61.31
ATOM	231	N	ALA	844	35.925	30.888	31.140	1.00	66.30
ATOM	233	CA	ALA	844	36.450	31.390	32.403	1.00	69.69
ATOM	234	CB	ALA	844	37.655	30.574	32.851	1.00	68.47
ATOM	235	C	ALA	844	36.839	32.855	32.112	1.00	73.15
ATOM	236	O	ALA	844	36.723	33.667	33.244	1.00	75.00
ATOM	237	N	PHE	845	37.251	33.184	30.981	1.00	76.12
ATOM	239	CA	PHE	845	37.699	34.538	30.618	1.00	74.99
ATOM	240	CB	PHE	845	39.135	34.479	30.014	1.00	72.01
ATOM	241	C	PHE	845	36.766	35.353	29.700	1.00	73.81
ATOM	242	O	PHE	845	36.404	36.499	30.020	1.00	76.82
ATOM	243	N	GLY	846	36.368	34.767	28.576	1.00	68.48
ATOM	245	CA	GLY	846	35.527	35.495	27.645	1.00	61.76
ATOM	246	C	GLY	846	34.102	35.023	27.606	1.00	57.98
ATOM	247	O	GLY	846	33.658	34.305	28.491	1.00	59.43
ATOM	248	N	GLN	847	33.400	35.413	26.553	1.00	55.08
ATOM	250	CA	GLN	847	32.006	35.050	26.354	1.00	52.26
ATOM	251	CB	GLN	847	31.160	35.668	27.449	1.00	55.14
ATOM	252	CG	GLN	847	29.706	35.703	27.075	1.00	61.40
ATOM	253	CD	GLN	847	28.951	36.735	27.844	1.00	65.75
ATOM	254	OE1	GLN	847	27.772	36.543	28.150	1.00	69.74
ATOM	255	NE2	GLN	847	29.614	37.852	28.166	1.00	68.83
ATOM	258	C	GLN	847	31.508	37.573	25.001	1.00	47.29
ATOM	259	O	GLN	847	31.637	36.764	24.713	1.00	52.89

## FIG. 7(6)

ATOM	260	N	VAL	848	30.912	34.707	24.195	1.00	38.17
ATOM	262	CA	VAL	848	30.418	35.122	22.898	1.00	30.28
ATOM	263	CB	VAL	848	30.792	34.137	21.833	1.00	28.01
ATOM	264	CG1	VAL	848	30.542	34.744	20.442	1.00	23.32
ATOM	265	CG2	VAL	848	32.239	33.759	22.016	1.00	22.18
ATOM	266	C	VAL	848	28.920	35.262	22.939	1.00	31.80
ATOM	267	O	VAL	848	28.221	34.525	23.625	1.00	32.87
ATOM	268	N	ILE	849	28.410	36.196	22.166	1.00	29.87
ATOM	270	CA	ILE	849	26.990	36.436	22.159	1.00	25.35
ATOM	271	CB	ILE	849	26.602	37.448	23.328	1.00	31.46
ATOM	272	CG2	ILE	849	27.766	38.373	23.732	1.00	32.09
ATOM	273	CG1	ILE	849	25.353	38.244	23.003	1.00	31.00
ATOM	274	CD1	ILE	849	24.895	39.035	24.199	1.00	37.56
ATOM	275	C	ILE	849	26.493	36.851	20.798	1.00	23.02
ATOM	276	O	ILE	849	27.167	37.540	20.070	1.00	27.56
ATOM	277	N	GLU	850	25.376	36.294	20.390	1.00	25.56
ATOM	279	CA	GLU	850	24.802	36.626	19.107	1.00	26.63
ATOM	280	CB	GLU	850	23.577	35.785	18.894	1.00	27.45
ATOM	281	CG	GLU	850	23.414	35.361	17.487	1.00	34.57
ATOM	282	CD	GLU	850	22.155	34.590	17.293	1.00	34.46
ATOM	283	OE1	GLU	850	21.602	34.655	16.184	1.00	42.38
ATOM	284	OE2	GLU	850	21.710	33.924	18.248	1.00	40.93
ATOM	285	C	GLU	850	24.422	38.111	19.028	1.00	27.83
ATOM	286	O	GLU	850	24.240	38.755	20.047	1.00	25.02
ATOM	287	N	ALA	851	24.291	38.640	17.814	1.00	29.11
ATOM	289	CA	ALA	851	23.958	40.043	17.621	1.00	27.32
ATOM	290	CB	ALA	851	25.080	40.922	18.170	1.00	18.65
ATOM	291	C	ALA	851	23.731	40.387	16.160	1.00	26.61
ATOM	292	O	ALA	851	24.328	39.785	15.283	1.00	26.99
ATOM	293	N	ASP	852	22.836	41.343	15.917	1.00	30.82
ATOM	295	CA	ASP	852	22.538	41.862	14.566	1.00	31.76
ATOM	296	CB	ASP	852	21.050	42.186	14.386	1.00	39.33
ATOM	297	CG	ASP	852	20.222	40.993	13.993	1.00	47.41
ATOM	298	OD1	ASP	852	19.687	40.330	14.906	1.00	54.12
ATOM	299	OD2	ASP	852	20.066	40.754	12.775	1.00	53.02
ATOM	300	C	ASP	852	23.265	43.204	14.506	1.00	25.97
ATOM	301	O	ASP	852	23.096	44.021	15.416	1.00	21.64
ATOM	302	N	ALA	853	24.099	43.411	13.495	1.00	20.18
ATOM	304	CA	ALA	853	24.818	44.672	13.342	1.00	23.55
ATOM	305	CB	ALA	853	26.305	44.440	13.292	1.00	23.32
ATOM	306	C	ALA	853	24.311	45.222	12.026	1.00	23.89
ATOM	307	O	ALA	853	24.079	44.439	11.108	1.00	26.15
ATOM	308	N	PHE	854	24.044	46.526	11.936	1.00	22.87

## FIG. 7(7)

ATOM	310	CA	PHE	854	23.529	47.059	10.680	1.00	16.46
ATOM	311	CB	PHE	854	22.487	48.135	10.901	1.00	23.71
ATOM	312	CG	PHE	854	22.020	48.758	9.643	1.00	27.62
ATOM	313	CD1	PHE	854	22.476	50.011	9.266	1.00	28.26
ATOM	314	CD2	PHE	854	21.205	48.052	8.771	1.00	31.56
ATOM	315	CE1	PHE	854	22.136	50.549	8.025	1.00	30.16
ATOM	316	CE2	PHE	854	20.856	48.592	7.512	1.00	34.04
ATOM	317	CZ	PHE	854	21.328	49.838	7.145	1.00	28.32
ATOM	318	C	PHE	854	24.618	47.569	9.794	1.00	14.10
ATOM	319	O	PHE	854	25.493	48.299	10.209	1.00	17.34
ATOM	320	N	GLY	855	24.556	47.163	8.553	1.00	17.45
ATOM	322	CA	GLY	855	25.559	47.571	7.604	1.00	18.50
ATOM	323	C	GLY	855	26.988	47.318	8.020	1.00	22.65
ATOM	324	O	GLY	855	27.806	48.193	7.777	1.00	26.82
ATOM	325	N	ILE	856	27.332	46.150	8.580	1.00	23.51
ATOM	327	CA	ILE	856	28.740	45.886	8.983	1.00	24.11
ATOM	328	CB	ILE	856	28.868	44.692	9.980	1.00	27.72
ATOM	329	CG2	ILE	856	28.535	43.370	9.259	1.00	29.88
ATOM	330	CG1	ILE	856	30.282	44.663	10.608	1.00	23.26
ATOM	331	CD1	ILE	856	30.371	44.079	12.034	1.00	21.70
ATOM	332	C	ILE	856	29.704	45.665	7.805	1.00	24.83
ATOM	333	O	ILE	856	30.918	45.721	7.950	1.00	28.37
ATOM	334	N	ASP	857	29.145	45.460	6.626	1.00	27.69
ATOM	336	CA	ASP	857	29.926	45.248	5.420	1.00	31.23
ATOM	337	CB	ASP	857	29.566	43.891	4.838	1.00	34.80
ATOM	338	CG	ASP	857	28.074	43.658	4.811	1.00	40.03
ATOM	339	OD1	ASP	857	27.328	44.597	4.448	1.00	43.33
ATOM	340	OD2	ASP	857	27.641	42.549	5.200	1.00	46.87
ATOM	341	C	ASP	857	29.654	46.323	4.370	1.00	32.81
ATOM	342	O	ASP	857	29.721	46.040	3.183	1.00	38.59
ATOM	343	N	LYS	858	29.299	47.529	4.813	1.00	34.74
ATOM	345	CA	LYS	858	28.987	48.690	3.946	1.00	34.64
ATOM	346	CB	LYS	858	30.061	48.947	2.889	1.00	31.38
ATOM	347	CG	LYS	858	31.462	48.964	3.418	1.00	34.36
ATOM	348	CD	LYS	858	31.605	49.890	4.603	1.00	39.41
ATOM	349	CE	LYS	858	33.005	49.791	5.228	1.00	39.87
ATOM	350	NZ	LYS	858	34.059	50.089	4.218	1.00	39.89
ATOM	354	C	LYS	858	27.629	48.709	3.254	1.00	32.27
ATOM	355	O	LYS	858	27.249	49.737	2.724	1.00	35.02
ATOM	356	N	THR	859	26.891	47.607	3.258	1.00	32.20
ATOM	358	CA	THR	859	25.597	47.610	2.600	1.00	30.11
ATOM	359	CB	THR	859	25.355	46.332	1.785	1.00	30.38
ATOM	360	OG1	THR	859	25.365	45.187	2.641	1.00	32.29

FIG. 7(8)

ATOM	362	CG2 THR	859	26.437	46.179	0.757	1.00	32.22
ATOM	363	C THR	859	24.450	47.839	3.546	1.00	28.71
ATOM	364	O THR	859	24.577	47.647	4.750	1.00	30.55
ATOM	365	N ALA	860	23.303	48.201	2.989	1.00	30.07
ATOM	367	CA ALA	860	22.123	48.474	3.784	1.00	28.01
ATOM	368	CB ALA	860	21.141	49.253	2.928	1.00	23.78
ATOM	369	C ALA	860	21.461	47.222	4.394	1.00	28.00
ATOM	370	O ALA	860	20.251	47.100	4.373	1.00	31.77
ATOM	371	N THR	861	22.228	46.325	5.008	1.00	29.99
ATOM	373	CA THR	861	21.663	45.078	5.577	1.00	27.77
ATOM	374	CB THR	861	22.186	43.857	4.808	1.00	20.97
ATOM	375	OG1 THR	861	23.614	43.926	4.687	1.00	27.23
ATOM	377	CG2 THR	861	21.608	43.794	3.449	1.00	29.39
ATOM	378	C THR	861	21.986	44.790	7.055	1.00	31.89
ATOM	379	O THR	861	23.095	45.077	7.532	1.00	34.73
ATOM	380	N CYS	862	21.037	44.183	7.770	1.00	34.09
ATOM	382	CA CYS	862	21.250	43.805	9.178	1.00	31.63
ATOM	383	CB CYS	862	19.922	43.756	9.943	1.00	27.50
ATOM	384	SG CYS	862	19.863	44.908	11.327	1.00	41.79
ATOM	385	C CYS	862	21.876	42.424	9.146	1.00	25.51
ATOM	386	O CYS	862	21.241	41.492	8.700	1.00	30.38
ATOM	387	N ARG	863	23.136	42.307	9.541	1.00	27.68
ATOM	389	CA ARG	863	23.839	41.025	9.532	1.00	28.29
ATOM	390	CB ARG	863	25.211	41.210	8.882	1.00	36.18
ATOM	391	CG ARG	863	25.775	39.945	8.275	1.00	48.71
ATOM	392	CD ARG	863	27.282	40.034	7.943	1.00	58.46
ATOM	393	NE ARG	863	27.824	38.721	7.550	1.00	65.04
ATOM	395	CZ ARG	863	29.112	38.452	7.330	1.00	65.66
ATOM	396	NH1 ARG	863	29.482	37.219	6.985	1.00	67.60
ATOM	399	NH2 ARG	863	30.030	39.409	7.421	1.00	66.49
ATOM	402	C ARG	863	24.006	40.409	10.943	1.00	28.34
ATOM	403	O ARG	863	24.337	41.125	11.904	1.00	24.64
ATOM	404	N THR	864	23.735	39.100	11.078	1.00	23.23
ATOM	406	CA THR	864	23.900	38.426	12.364	1.00	18.91
ATOM	407	CB THR	864	23.062	37.099	12.489	1.00	19.40
ATOM	408	OG1 THR	864	21.672	37.435	12.547	1.00	24.20
ATOM	410	CG2 THR	864	23.371	36.351	13.793	1.00	8.83
ATOM	411	C THR	864	25.385	38.148	12.462	1.00	20.93
ATOM	412	O THR	864	26.001	37.736	11.468	1.00	20.14
ATOM	413	N VAL	865	25.962	38.442	13.634	1.00	16.03
ATOM	415	CA VAL	865	27.381	38.254	13.897	1.00	16.69
ATOM	416	CB VAL	865	28.175	39.620	13.906	1.00	17.70
ATOM	417	CG1 VAL	865	28.107	40.299	12.539	1.00	21.22

## FIG. 7(9)

ATOM	418	CG2 VAL	865	27.625	40.554	14.979	1.00	20.92
ATOM	419	C VAL	865	27.533	37.660	15.276	1.00	15.90
ATOM	420	O VAL	865	26.552	37.554	15.995	1.00	16.43
ATOM	421	N ALA	866	28.775	37.295	15.612	1.00	16.37
ATOM	423	CA ALA	866	29.210	36.753	16.910	1.00	18.08
ATOM	424	CB ALA	866	30.022	35.490	16.691	1.00	7.41
ATOM	425	C ALA	866	30.117	37.834	17.588	1.00	23.87
ATOM	426	O ALA	866	31.121	38.261	16.998	1.00	24.17
ATOM	427	N VAL	867	29.790	38.235	18.827	1.00	26.69
ATOM	429	CA VAL	867	30.534	39.268	19.554	1.00	20.37
ATOM	430	CB VAL	867	29.592	40.365	20.088	1.00	17.71
ATOM	431	CG1 VAL	867	30.361	41.586	20.519	1.00	9.32
ATOM	432	CG2 VAL	867	28.635	40.753	19.027	1.00	14.57
ATOM	433	C VAL	867	31.320	38.748	20.728	1.00	21.67
ATOM	434	O VAL	867	30.784	38.085	21.606	1.00	23.57
ATOM	435	N LYS	868	32.616	38.982	20.694	1.00	21.65
ATOM	437	CA LYS	868	33.471	38.593	21.782	1.00	27.02
ATOM	438	CB LYS	868	34.860	38.169	21.289	1.00	29.71
ATOM	439	CG LYS	868	34.842	36.963	20.405	1.00	37.08
ATOM	440	CD LYS	868	36.151	36.810	19.666	1.00	44.81
ATOM	441	CE LYS	868	36.183	35.512	18.868	1.00	45.52
ATOM	442	NZ LYS	868	37.548	35.298	18.274	1.00	47.28
ATOM	446	C LYS	868	33.585	39.842	22.647	1.00	26.11
ATOM	447	O LYS	868	33.962	40.914	22.188	1.00	24.72
ATOM	448	N MET	869	33.184	39.721	23.888	1.00	29.77
ATOM	450	CA MET	869	33.299	40.821	24.803	1.00	32.95
ATOM	451	CB MET	869	31.958	41.491	24.996	1.00	30.57
ATOM	452	CG MET	869	30.900	40.542	25.463	1.00	32.29
ATOM	453	SD MET	869	29.348	41.157	24.961	1.00	42.68
ATOM	454	CE MET	869	29.251	42.663	25.919	1.00	35.32
ATOM	455	C MET	869	33.778	40.205	26.095	1.00	40.29
ATOM	456	O MET	869	33.921	38.967	26.216	1.00	35.26
ATOM	457	N LEU	870	34.079	41.066	27.051	1.00	46.88
ATOM	459	CA LEU	870	34.521	40.576	28.337	1.00	51.36
ATOM	460	CB LEU	870	35.544	41.549	28.937	1.00	48.55
ATOM	461	CG LEU	870	36.862	41.677	28.180	1.00	44.32
ATOM	462	CD1 LEU	870	37.734	42.739	28.855	1.00	36.89
ATOM	463	CD2 LEU	870	37.535	40.306	28.149	1.00	41.04
ATOM	464	C LEU	870	33.344	40.306	29.311	1.00	53.63
ATOM	465	O LEU	870	32.163	40.615	29.037	1.00	52.68
ATOM	466	N LYS	871	33.675	39.644	30.412	1.00	56.89
ATOM	468	CA LYS	871	32.695	39.346	31.426	1.00	58.53
ATOM	469	CB LYS	871	33.083	38.077	32.169	1.00	59.89

00000000.111301

FIG. 7(10)

ATOM	470	CG	LYS	871	31.903	37.220	32.546	1.00	63.81
ATOM	471	CD	LYS	871	31.912	35.965	31.719	1.00	65.43
ATOM	472	CE	LYS	871	33.268	35.318	31.853	1.00	70.59
ATOM	473	NZ	LYS	871	33.318	34.051	31.135	1.00	76.57
ATOM	477	C	LYS	871	32.649	40.518	32.404	1.00	59.44
ATOM	478	O	LYS	871	33.582	41.342	32.464	1.00	56.75
ATOM	479	N	GLU	872	31.566	40.571	33.177	1.00	61.50
ATOM	481	CA	GLU	872	31.357	41.618	34.177	1.00	64.12
ATOM	482	CB	GLU	872	29.928	41.539	34.739	1.00	66.85
ATOM	483	CG	GLU	872	28.846	41.903	33.729	1.00	71.27
ATOM	484	CD	GLU	872	29.060	41.218	32.387	1.00	74.41
ATOM	485	OE1	GLU	872	28.900	39.980	32.326	1.00	76.27
ATOM	486	OE2	GLU	872	29.443	41.903	31.411	1.00	74.20
ATOM	487	C	GLU	872	32.387	41.424	35.288	1.00	60.87
ATOM	488	O	GLU	872	32.331	40.441	36.026	1.00	61.34
ATOM	489	N	GLY	873	33.368	42.319	35.335	1.00	57.40
ATOM	491	CA	GLY	873	34.408	42.223	36.337	1.00	53.93
ATOM	492	C	GLY	873	35.703	41.641	35.803	1.00	52.30
ATOM	493	O	GLY	873	36.518	41.103	36.563	1.00	51.95
ATOM	494	N	ALA	874	35.881	41.721	34.491	1.00	51.13
ATOM	496	CA	ALA	874	37.090	41.217	33.862	1.00	51.21
ATOM	497	CB	ALA	874	36.875	41.049	32.335	1.00	48.57
ATOM	498	C	ALA	874	38.270	42.172	34.199	1.00	50.40
ATOM	499	O	ALA	874	38.101	43.388	34.369	1.00	48.57
ATOM	500	N	THR	875	39.465	41.609	34.245	1.00	48.33
ATOM	502	CA	THR	875	40.657	42.334	34.617	1.00	51.59
ATOM	503	CB	THR	875	41.572	41.428	35.447	1.00	54.42
ATOM	504	OG1	THR	875	42.677	42.184	35.937	1.00	60.69
ATOM	506	CG2	THR	875	42.107	40.280	34.593	1.00	60.52
ATOM	507	C	THR	875	41.455	42.830	33.448	1.00	51.15
ATOM	508	O	THR	875	41.395	42.263	32.372	1.00	52.26
ATOM	509	N	HIS	876	42.343	43.770	33.733	1.00	53.93
ATOM	511	CA	HIS	876	43.215	44.392	32.737	1.00	55.68
ATOM	512	CB	HIS	876	44.170	45.383	33.419	1.00	54.06
ATOM	513	CG	HIS	876	45.609	44.980	33.361	1.00	56.52
ATOM	514	CD2	HIS	876	46.595	45.314	32.487	1.00	56.83
ATOM	515	ND1	HIS	876	46.191	44.149	34.297	1.00	60.22
ATOM	517	CE1	HIS	876	47.472	43.992	34.009	1.00	62.12
ATOM	518	NE2	HIS	876	47.739	44.689	32.916	1.00	59.66
ATOM	520	C	HIS	876	44.003	43.385	31.898	1.00	54.72
ATOM	521	O	HIS	876	44.510	43.712	30.810	1.00	54.08
ATOM	522	N	SER	877	44.167	42.189	32.434	1.00	52.07
ATOM	524	CA	SER	877	44.872	41.160	31.704	1.00	53.73

00936332-11301



FIG. 7(11)

ATOM	525	CB	SER	877	45.622	40.256	32.669	1.00	57.58
ATOM	526	OG	SER	877	46.559	41.054	33.379	1.00	63.62
ATOM	528	C	SER	877	43.880	40.410	30.810	1.00	51.29
ATOM	529	O	SER	877	44.227	39.962	29.715	1.00	50.11
ATOM	530	N	GLU	878	42.629	40.320	31.246	1.00	47.72
ATOM	532	CA	GLU	878	41.620	39.696	30.410	1.00	45.39
ATOM	533	CB	GLU	878	40.335	39.483	31.201	1.00	48.19
ATOM	534	CG	GLU	878	40.383	38.191	32.013	1.00	60.81
ATOM	535	CD	GLU	878	39.304	38.086	33.092	1.00	68.27
ATOM	536	OE1	GLU	878	38.448	37.162	33.027	1.00	70.85
ATOM	537	OE2	GLU	878	39.336	38.911	34.029	1.00	67.92
ATOM	538	C	GLU	878	41.448	40.702	29.277	1.00	40.09
ATOM	539	O	GLU	878	41.536	40.365	28.104	1.00	38.92
ATOM	540	N	HIS	879	41.393	41.966	29.659	1.00	34.60
ATOM	542	CA	HIS	879	41.252	43.072	28.732	1.00	36.68
ATOM	543	CB	HIS	879	41.070	44.392	29.505	1.00	44.03
ATOM	544	CG	HIS	879	40.637	45.547	28.652	1.00	43.54
ATOM	545	CD2	HIS	879	39.403	46.025	28.364	1.00	40.08
ATOM	546	ND1	HIS	879	41.529	46.307	27.917	1.00	39.08
ATOM	548	CE1	HIS	879	40.860	47.192	27.202	1.00	40.82
ATOM	549	NE2	HIS	879	39.572	47.045	27.452	1.00	49.01
ATOM	551	C	HIS	879	42.455	43.172	27.797	1.00	34.17
ATOM	552	O	HIS	879	42.293	43.494	26.626	1.00	33.65
ATOM	553	N	ARG	880	43.664	42.993	28.319	1.00	33.25
ATOM	555	CA	ARG	880	44.838	43.033	27.470	1.00	29.84
ATOM	556	CB	ARG	880	46.124	42.932	28.299	1.00	36.53
ATOM	557	CG	ARG	880	46.615	41.470	28.452	1.00	50.57
ATOM	558	CD	ARG	880	48.121	41.276	28.649	1.00	56.95
ATOM	559	NE	ARG	880	48.555	41.748	29.960	1.00	63.99
ATOM	561	CZ	ARG	880	49.030	42.967	30.175	1.00	66.67
ATOM	562	NH1	ARG	880	49.391	43.327	31.397	1.00	66.45
ATOM	565	NH2	ARG	880	49.170	43.813	29.157	1.00	66.52
ATOM	568	C	ARG	880	44.741	41.799	26.533	1.00	29.72
ATOM	569	O	ARG	880	45.246	41.808	25.401	1.00	21.81
ATOM	570	N	ALA	881	44.070	40.747	27.006	1.00	28.49
ATOM	572	CA	ALA	881	43.942	39.514	26.227	1.00	31.72
ATOM	573	CB	ALA	881	43.587	38.342	27.142	1.00	31.57
ATOM	574	C	ALA	881	42.978	39.592	25.044	1.00	29.98
ATOM	575	O	ALA	881	43.319	39.154	23.944	1.00	31.95
ATOM	576	N	LEU	882	41.766	40.099	25.273	1.00	27.12
ATOM	578	CA	LEU	882	40.804	40.248	24.193	1.00	27.43
ATOM	579	CB	LEU	882	39.493	40.784	24.728	1.00	23.93
ATOM	580	CG	LEU	882	38.402	40.925	23.662	1.00	25.91

FIG. 7(12)

ATOM	581	CD1 LEU	882	38.435	39.722	22.743	1.00	21.91
ATOM	582	CD2 LEU	882	37.013	41.102	24.325	1.00	23.61
ATOM	583	C LEU	882	41.368	41.230	23.151	1.00	30.62
ATOM	584	O LEU	882	41.312	40.982	21.945	1.00	27.61
ATOM	585	N MET	883	41.940	42.325	23.643	1.00	29.74
ATOM	587	CA MET	883	42.548	43.364	22.808	1.00	30.75
ATOM	588	CB MET	883	43.001	44.516	23.738	1.00	27.47
ATOM	589	CG MET	883	43.432	45.828	23.084	1.00	33.64
ATOM	590	SD MET	883	42.313	46.592	21.882	1.00	33.18
ATOM	591	CE MET	883	41.031	47.285	22.943	1.00	33.54
ATOM	592	C MET	883	43.711	42.756	21.965	1.00	29.92
ATOM	593	O MET	883	43.862	43.022	20.766	1.00	28.38
ATOM	594	N SER	884	44.501	41.893	22.588	1.00	29.75
ATOM	596	CA SER	884	45.597	41.231	21.912	1.00	28.29
ATOM	597	CB SER	884	46.343	40.391	22.923	1.00	32.03
ATOM	598	OG SER	884	47.220	39.502	22.270	1.00	44.59
ATOM	600	C SER	884	45.091	40.329	20.778	1.00	29.39
ATOM	601	O SER	884	45.595	40.359	19.654	1.00	28.92
ATOM	602	N GLU	885	44.084	39.526	21.071	1.00	25.33
ATOM	604	CA GLU	885	43.559	38.661	20.058	1.00	27.47
ATOM	605	CB GLU	885	42.563	37.692	20.661	1.00	31.61
ATOM	606	CG GLU	885	41.142	38.108	20.642	1.00	46.01
ATOM	607	CD GLU	885	40.215	36.903	20.799	1.00	55.19
ATOM	608	OE1 GLU	885	40.018	36.469	21.964	1.00	58.80
ATOM	609	OE2 GLU	885	39.715	36.379	19.762	1.00	54.01
ATOM	610	C GLU	885	42.945	39.470	18.924	1.00	28.59
ATOM	611	O GLU	885	42.833	38.983	17.805	1.00	26.67
ATOM	612	N LEU	886	42.560	40.712	19.211	1.00	27.06
ATOM	614	CA LEU	886	41.994	41.594	18.205	1.00	23.75
ATOM	615	CB LEU	886	41.483	42.887	18.847	1.00	22.79
ATOM	616	CG LEU	886	41.122	44.033	17.905	1.00	17.60
ATOM	617	CD1 LEU	886	39.981	43.608	16.999	1.00	11.98
ATOM	618	CD2 LEU	886	40.747	45.285	18.702	1.00	18.31
ATOM	619	C LEU	886	43.049	41.936	17.147	1.00	24.77
ATOM	620	O LEU	886	42.767	41.880	15.939	1.00	22.15
ATOM	621	N LYS	887	44.265	42.246	17.602	1.00	25.08
ATOM	623	CA LYS	887	45.384	42.613	16.722	1.00	24.94
ATOM	624	CB LYS	887	46.517	43.227	17.544	1.00	29.70
ATOM	625	CG LYS	887	46.105	44.304	18.560	1.00	30.67
ATOM	626	CD LYS	887	45.556	45.551	17.895	1.00	28.99
ATOM	627	CE LYS	887	45.170	46.645	18.923	1.00	26.07
ATOM	628	NZ LYS	887	46.354	47.216	19.621	1.00	17.59
ATOM	632	C LYS	887	45.921	41.407	15.925	1.00	25.59

ATOM	633	O	LYS	887	46.388	41.547	14.793	1.00	30.23
ATOM	634	N	ILE	888	45.917	40.235	16.542	1.00	20.48
ATOM	636	CA	ILE	888	46.347	39.028	15.859	1.00	21.46
ATOM	637	CB	ILE	888	46.306	37.795	16.816	1.00	22.73
ATOM	638	CG2	ILE	888	46.604	36.556	16.047	1.00	24.05
ATOM	639	CG1	ILE	888	47.355	37.929	17.937	1.00	23.32
ATOM	640	CD1	ILE	888	47.092	37.058	19.190	1.00	18.29
ATOM	641	C	ILE	888	45.392	38.822	14.663	1.00	19.5
ATOM	642	O	ILE	888	45.834	38.710	13.529	1.00	19.15
ATOM	643	N	LEU	889	44.088	38.828	14.922	1.00	15.54
ATOM	645	CA	LEU	889	43.078	38.677	13.872	1.00	20.73
ATOM	646	CB	LEU	889	41.658	38.818	14.446	1.00	19.41
ATOM	647	CG	LEU	889	41.204	37.652	15.372	1.00	22.61
ATOM	648	CD1	LEU	889	39.735	37.752	15.697	1.00	13.49
ATOM	649	CD2	LEU	889	41.500	36.263	14.764	1.00	18.87
ATOM	650	C	LEU	889	43.308	39.678	12.762	1.00	24.12
ATOM	651	O	LEU	889	43.342	39.344	11.584	1.00	28.65
ATOM	652	N	ILE	890	43.461	40.931	13.138	1.00	29.62
ATOM	654	CA	ILE	890	43.753	41.953	12.158	1.00	26.41
ATOM	655	CB	ILE	890	43.966	43.310	12.865	1.00	24.45
ATOM	656	CG2	ILE	890	44.555	44.333	11.888	1.00	30.36
ATOM	657	CG1	ILE	890	42.645	43.825	13.438	1.00	19.80
ATOM	658	CD1	ILE	890	42.812	45.061	14.241	1.00	14.93
ATOM	659	C	ILE	890	45.053	41.519	11.415	1.00	28.37
ATOM	660	O	ILE	890	45.126	41.553	10.191	1.00	24.83
ATOM	661	N	HIS	891	46.066	41.099	12.164	1.00	27.37
ATOM	663	CA	HIS	891	47.309	40.659	11.567	1.00	27.76
ATOM	664	CB	HIS	891	48.277	40.175	12.654	1.00	36.80
ATOM	665	CG	HIS	891	49.509	39.507	12.100	1.00	47.58
ATOM	666	CD2	HIS	891	50.811	39.869	12.147	1.00	46.38
ATOM	667	ND1	HIS	891	49.450	38.394	11.276	1.00	52.71
ATOM	669	CE1	HIS	891	50.660	38.114	10.825	1.00	50.46
ATOM	670	NE2	HIS	891	51.505	38.993	11.340	1.00	54.62
ATOM	672	C	HIS	891	47.098	39.536	10.537	1.00	27.01
ATOM	673	O	HIS	891	47.522	39.647	9.402	1.00	32.82
ATOM	674	N	ILE	892	46.580	38.403	10.995	1.00	24.99
ATOM	676	CA	ILE	892	46.300	37.216	10.181	1.00	23.19
ATOM	677	CB	ILE	892	45.233	36.282	10.907	1.00	24.73
ATOM	678	CG2	ILE	892	44.643	35.295	9.941	1.00	20.03
ATOM	679	CG1	ILE	892	45.828	35.522	12.104	1.00	26.32
ATOM	680	CD1	ILE	892	47.015	36.222	12.787	1.00	36.72
ATOM	681	C	ILE	892	45.700	37.625	8.848	1.00	22.57
ATOM	682	O	ILE	892	46.115	37.155	7.775	1.00	25.20









## FIG. 7(18)

ATOM	890	CG	GLU	917	32.946	36.348	9.464	1.00	24.11
ATOM	891	CD	GLU	917	33.543	35.651	8.258	1.00	26.52
ATOM	892	OE1	GLU	917	33.060	35.904	7.139	1.00	27.67
ATOM	893	OE2	GLU	917	34.480	34.841	8.425	1.00	28.39
ATOM	894	C	GLU	917	30.853	35.051	12.434	1.00	14.78
ATOM	895	O	GLU	917	31.445	34.344	13.234	1.00	14.35
ATOM	896	N	PHE	918	29.557	34.958	12.229	1.00	19.12
ATOM	898	CA	PHE	918	28.688	34.042	12.966	1.00	18.07
ATOM	899	CB	PHE	918	27.334	34.721	13.168	1.00	18.48
ATOM	900	CG	PHE	918	26.275	33.840	13.748	1.00	17.83
ATOM	901	CD1	PHE	918	26.328	33.456	15.081	1.00	18.65
ATOM	902	CD2	PHE	918	25.213	33.400	12.953	1.00	21.10
ATOM	903	CE1	PHE	918	25.336	32.639	15.613	1.00	18.12
ATOM	904	CE2	PHE	918	24.210	32.580	13.473	1.00	14.29
ATOM	905	CZ	PHE	918	24.274	32.201	14.799	1.00	17.78
ATOM	906	C	PHE	918	28.487	32.805	12.113	1.00	18.83
ATOM	907	O	PHE	918	28.081	32.917	10.964	1.00	11.61
ATOM	908	N	CYS	919	28.761	31.635	12.676	1.00	19.49
ATOM	910	CA	CYS	919	28.590	30.372	11.947	1.00	19.00
ATOM	911	CB	CYS	919	29.855	29.566	12.069	1.00	16.78
ATOM	912	SG	CYS	919	31.225	30.428	11.325	1.00	16.84
ATOM	913	C	CYS	919	27.383	29.659	12.556	1.00	21.18
ATOM	914	O	CYS	919	27.474	29.135	13.676	1.00	20.69
ATOM	915	N	LYS	920	26.269	29.653	11.818	1.00	18.06
ATOM	917	CA	LYS	920	24.998	29.130	12.318	1.00	28.13
ATOM	918	CB	LYS	920	23.799	29.581	11.459	1.00	25.17
ATOM	919	CG	LYS	920	23.595	28.799	10.207	1.00	33.78
ATOM	920	CD	LYS	920	22.658	29.509	9.250	1.00	40.32
ATOM	921	CE	LYS	920	21.261	29.706	9.829	1.00	51.94
ATOM	922	NZ	LYS	920	20.343	30.396	8.845	1.00	56.09
ATOM	926	C	LYS	920	24.813	27.679	12.700	1.00	28.53
ATOM	927	O	LYS	920	24.020	27.405	13.592	1.00	31.57
ATOM	928	N	PHE	921	25.533	26.757	12.078	1.00	24.89
ATOM	930	CA	PHE	921	25.328	25.362	12.409	1.00	21.12
ATOM	931	CB	PHE	921	25.497	24.518	11.171	1.00	20.75
ATOM	932	CG	PHE	921	24.588	24.917	10.084	1.00	22.95
ATOM	933	CD1	PHE	921	23.224	24.734	10.219	1.00	27.55
ATOM	934	CD2	PHE	921	25.077	25.564	8.975	1.00	29.40
ATOM	935	CE1	PHE	921	22.362	25.205	9.269	1.00	35.42
ATOM	936	CE2	PHE	921	24.237	26.041	8.013	1.00	32.24
ATOM	937	CZ	PHE	921	22.869	25.870	8.154	1.00	38.81
ATOM	938	C	PHE	921	26.158	24.823	13.535	1.00	21.23
ATOM	939	O	PHE	921	26.002	23.664	13.900	1.00	22.74

00939892.141701







## FIG. 7(21)

ATOM	1052	NH1	ARG	932	30.018	9.098	15.809	1.00	47.32
ATOM	1055	NH2	ARG	932	27.916	8.725	16.645	1.00	53.04
ATOM	1058	C	ARG	932	23.621	9.087	10.273	1.00	41.54
ATOM	1059	O	ARG	932	23.821	8.135	9.532	1.00	41.31
ATOM	1060	N	ASN	933	22.412	9.582	10.536	1.00	44.37
ATOM	1062	CA	ASN	933	21.181	9.069	9.956	1.00	47.14
ATOM	1063	CB	ASN	933	19.974	9.453	10.824	1.00	54.55
ATOM	1064	CG	ASN	933	19.783	8.545	12.050	1.00	57.14
ATOM	1065	OD1	ASN	933	20.622	7.693	12.369	1.00	54.11
ATOM	1066	ND2	ASN	933	18.668	8.752	12.757	1.00	57.76
ATOM	1069	C	ASN	933	20.974	9.680	8.589	1.00	49.60
ATOM	1070	O	ASN	933	20.260	9.125	7.753	1.00	55.62
ATOM	1071	N	GLU	934	21.494	10.888	8.403	1.00	52.11
ATOM	1073	CA	GLU	934	21.365	11.580	7.122	1.00	52.39
ATOM	1074	CB	GLU	934	20.859	13.007	7.323	1.00	56.14
ATOM	1075	CG	GLU	934	19.434	13.095	7.822	1.00	59.40
ATOM	1076	CD	GLU	934	19.332	13.686	9.211	1.00	63.97
ATOM	1077	OE1	GLU	934	18.427	13.250	9.953	1.00	69.17
ATOM	1078	OE2	GLU	934	20.138	14.580	9.563	1.00	64.27
ATOM	1079	C	GLU	934	22.677	11.593	6.332	1.00	50.45
ATOM	1080	O	GLU	934	23.188	12.663	5.961	1.00	50.70
ATOM	1081	N	PHE	935	23.205	10.396	6.070	1.00	46.25
ATOM	1083	CA	PHE	935	24.440	10.225	5.325	1.00	41.20
ATOM	1084	CB	PHE	935	25.638	10.121	6.268	1.00	40.97
ATOM	1085	CG	PHE	935	26.923	9.800	5.555	1.00	39.81
ATOM	1086	CD1	PHE	935	27.327	8.478	5.378	1.00	34.65
ATOM	1087	CD2	PHE	935	27.676	10.815	4.970	1.00	33.02
ATOM	1088	CE1	PHE	935	28.455	8.180	4.617	1.00	32.30
ATOM	1089	CE2	PHE	935	28.793	10.515	4.218	1.00	29.96
ATOM	1090	CZ	PHE	935	29.181	9.201	4.037	1.00	29.08
ATOM	1091	C	PHE	935	24.474	9.006	4.412	1.00	40.49
ATOM	1092	O	PHE	935	24.394	7.871	4.865	1.00	40.47
ATOM	1093	N	VAL	936	24.694	9.237	3.133	1.00	38.66
ATOM	1095	CA	VAL	936	24.809	8.138	2.208	1.00	43.29
ATOM	1096	CB	VAL	936	23.663	8.113	1.221	1.00	40.39
ATOM	1097	CG1	VAL	936	23.739	9.312	0.280	1.00	34.50
ATOM	1098	CG2	VAL	936	23.720	6.841	0.444	1.00	42.47
ATOM	1099	C	VAL	936	26.087	8.436	1.438	1.00	49.63
ATOM	1100	O	VAL	936	26.322	9.585	1.081	1.00	55.64
ATOM	1101	N	PRO	937	26.960	7.433	1.222	1.00	50.29
ATOM	1102	CD	PRO	937	26.966	6.087	1.822	1.00	49.69
ATOM	1103	CA	PRO	937	28.207	7.669	0.483	1.00	50.65
ATOM	1104	CB	PRO	937	28.676	6.260	0.177	1.00	46.68

009363311301

FIG. 7(22)

ATOM	1105	CG	PRO	937	28.378	5.582	1.493	1.00	47.42
ATOM	1106	C	PRO	937	28.019	8.501	-0.774	1.00	53.83
ATOM	1107	O	PRO	937	28.644	9.558	-0.937	1.00	53.64
ATOM	1108	N	TYR	938	27.153	8.046	-1.660	1.00	54.91
ATOM	1110	CA	TYR	938	26.918	8.803	-2.859	1.00	62.52
ATOM	1111	CB	TYR	938	27.580	8.161	-4.080	1.00	67.73
ATOM	1120	C	TYR	938	25.443	8.800	-3.059	1.00	67.31
ATOM	1121	O	TYR	938	24.722	8.082	-2.361	1.00	66.13
ATOM	1122	N	LYS	939	25.027	9.601	-4.038	1.00	75.30
ATOM	1124	CA	LYS	939	23.639	9.770	-4.445	1.00	81.21
ATOM	1125	CB	LYS	939	23.209	11.254	-4.284	1.00	80.04
ATOM	1126	C	LYS	939	23.543	9.331	-5.921	1.00	87.24
ATOM	1127	O	LYS	939	24.582	9.384	-6.646	1.00	90.23
ATOM	1129	CB	ASP	998	17.986	15.692	3.023	1.00	53.00
ATOM	1130	C	ASP	998	20.489	15.723	3.377	1.00	55.33
ATOM	1131	O	ASP	998	21.051	16.058	4.426	1.00	56.29
ATOM	1134	N	ASP	998	19.408	16.931	1.400	1.00	54.52
ATOM	1136	CA	ASP	998	19.279	16.514	2.829	1.00	55.12
ATOM	1137	N	PHE	999	20.900	14.687	2.653	1.00	52.90
ATOM	1139	CA	PHE	999	21.984	13.834	3.111	1.00	46.86
ATOM	1140	CB	PHE	999	21.841	12.420	2.528	1.00	51.05
ATOM	1141	CG	PHE	999	20.897	11.537	3.296	1.00	55.62
ATOM	1142	CD1	PHE	999	21.249	10.236	3.606	1.00	56.12
ATOM	1143	CD2	PHE	999	19.671	12.022	3.751	1.00	60.98
ATOM	1144	CE1	PHE	999	20.397	9.422	4.368	1.00	61.93
ATOM	1145	CE2	PHE	999	18.816	11.222	4.509	1.00	61.09
ATOM	1146	CZ	PHE	999	19.183	9.917	4.820	1.00	60.64
ATOM	1147	C	PHE	999	23.373	14.302	2.837	1.00	41.06
ATOM	1148	O	PHE	999	23.632	14.937	1.820	1.00	36.04
ATOM	1149	N	LEU	1000	24.238	14.057	3.812	1.00	37.57
ATOM	1151	CA	LEU	1000	25.651	14.326	3.652	1.00	36.08
ATOM	1152	CB	LEU	1000	26.401	14.306	4.985	1.00	35.67
ATOM	1153	CG	LEU	1000	25.923	15.286	6.057	1.00	36.23
ATOM	1154	CD1	LEU	1000	26.941	15.370	7.201	1.00	29.94
ATOM	1155	CD2	LEU	1000	25.707	16.654	5.435	1.00	38.66
ATOM	1156	C	LEU	1000	26.089	13.139	2.756	1.00	35.16
ATOM	1157	O	LEU	1000	25.330	12.167	2.569	1.00	32.68
ATOM	1158	N	THR	1001	27.292	13.228	2.201	1.00	29.92
ATOM	1160	CA	THR	1001	27.803	12.236	1.285	1.00	25.42
ATOM	1161	CB	THR	1001	27.396	12.560	-0.178	1.00	30.10

00939837 111701

FIG. 7(23)

ATOM 1162	OG1 THR 1001	28.055	13.771	-0.605	1.00	33.54
ATOM 1164	CG2 THR 1001	25.878	12.741	-0.326	1.00	29.24
ATOM 1165	C THR 1001	29.303	12.388	1.338	1.00	27.68
ATOM 1166	O THR 1001	29.805	13.303	1.985	1.00	28.02
ATOM 1167	N LEU 1002	30.020	11.552	0.592	1.00	26.85
ATOM 1169	CA LEU 1002	31.454	11.636	0.572	1.00	24.39
ATOM 1170	CB LEU 1002	32.044	10.545	-0.298	1.00	22.71
ATOM 1171	CG LEU 1002	32.269	9.304	0.573	1.00	27.80
ATOM 1172	CD1 LEU 1002	32.727	8.142	-0.280	1.00	27.11
ATOM 1173	CD2 LEU 1002	33.295	9.592	1.670	1.00	24.64
ATOM 1174	C LEU 1002	31.908	12.995	0.099	1.00	26.97
ATOM 1175	O LEU 1002	32.967	13.459	0.506	1.00	26.84
ATOM 1176	N GLU 1003	31.063	13.682	-0.666	1.00	27.89
ATOM 1178	CA GLU 1003	31.428	15.000	-1.185	1.00	28.02
ATOM 1179	CB GLU 1003	30.419	15.503	-2.208	1.00	32.50
ATOM 1180	CG GLU 1003	30.988	16.624	-3.077	1.00	37.49
ATOM 1181	CD GLU 1003	31.915	16.121	-4.170	1.00	38.89
ATOM 1182	OE1 GLU 1003	33.065	15.743	-3.886	1.00	43.61
ATOM 1183	OE2 GLU 1003	31.488	16.102	-5.331	1.00	46.97
ATOM 1184	C GLU 1003	31.591	16.044	-0.117	1.00	25.24
ATOM 1185	O GLU 1003	32.485	16.885	-0.211	1.00	26.57
ATOM 1186	N HIS 1004	30.748	15.953	0.913	1.00	23.16
ATOM 1188	CA HIS 1004	30.746	16.884	2.040	1.00	19.58
ATOM 1189	CB HIS 1004	29.508	16.719	2.912	1.00	19.12
ATOM 1190	CG HIS 1004	28.227	17.024	2.208	1.00	23.47
ATOM 1191	CD2 HIS 1004	27.173	17.784	2.570	1.00	23.78
ATOM 1192	ND1 HIS 1004	27.911	16.508	0.964	1.00	27.88
ATOM 1194	CE1 HIS 1004	26.718	16.936	0.596	1.00	20.57
ATOM 1195	NE2 HIS 1004	26.246	17.710	1.554	1.00	23.61
ATOM 1197	C HIS 1004	31.940	16.631	2.885	1.00	21.64
ATOM 1198	O HIS 1004	32.753	17.508	3.075	1.00	25.00
ATOM 1199	N LEU 1005	32.055	15.419	3.394	1.00	23.11
ATOM 1201	CA LEU 1005	33.186	15.072	4.222	1.00	23.79
ATOM 1202	CB LEU 1005	33.131	13.581	4.589	1.00	24.17
ATOM 1203	CG LEU 1005	32.183	13.199	5.743	1.00	27.48
ATOM 1204	CD1 LEU 1005	31.030	14.150	5.821	1.00	25.44
ATOM 1205	CD2 LEU 1005	31.679	11.771	5.627	1.00	22.50
ATOM 1206	C LEU 1005	34.506	15.467	3.558	1.00	20.41
ATOM 1207	O LEU 1005	35.361	16.034	4.206	1.00	21.82
ATOM 1208	N ILE 1006	34.668	15.212	2.264	1.00	19.50

00000000 00000000



## FIG. 7(25)

ATOM 1256 C PHE 1010	39.688	21.746	2.242	1.00	22.02
ATOM 1257 O PHE 1010	40.749	22.390	2.298	1.00	23.00
ATOM 1258 N GLN 1011	38.535	22.271	2.643	1.00	19.25
ATOM 1260 CA GLN 1011	38.418	23.640	3.159	1.00	19.07
ATOM 1261 CB GLN 1011	36.980	23.945	3.480	1.00	12.84
ATOM 1262 CG GLN 1011	36.117	24.005	2.270	1.00	6.53
ATOM 1263 CD GLN 1011	34.713	24.371	2.659	1.00	18.81
ATOM 1264 OE1 GLN 1011	34.490	25.382	3.347	1.00	21.22
ATOM 1265 NE2 GLN 1011	33.760	23.525	2.302	1.00	26.88
ATOM 1268 C GLN 1011	39.262	23.894	4.394	1.00	18.28
ATOM 1269 O GLN 1011	39.840	24.982	4.543	1.00	19.80
ATOM 1270 N VAL 1012	39.270	22.934	5.319	1.00	11.82
ATOM 1272 CA VAL 1012	40.110	23.063	6.500	1.00	13.54
ATOM 1273 CB VAL 1012	39.825	21.936	7.528	1.00	15.67
ATOM 1274 CG1 VAL 1012	40.686	22.107	8.795	1.00	10.56
ATOM 1275 CG2 VAL 1012	38.370	21.948	7.901	1.00	14.92
ATOM 1276 C VAL 1012	41.618	23.068	6.068	1.00	16.72
ATOM 1277 O VAL 1012	42.448	23.782	6.665	1.00	20.48
ATOM 1278 N ALA 1013	42.001	22.291	5.051	1.00	15.90
ATOM 1280 CA ALA 1013	43.401	22.352	4.602	1.00	17.77
ATOM 1281 CB ALA 1013	43.732	21.206	3.638	1.00	10.59
ATOM 1282 C ALA 1013	43.685	23.755	3.963	1.00	15.74
ATOM 1283 O ALA 1013	44.764	24.302	4.139	1.00	17.49
ATOM 1284 N LYS 1014	42.718	24.342	3.244	1.00	17.18
ATOM 1286 CA LYS 1014	42.866	25.706	2.665	1.00	15.11
ATOM 1287 CB LYS 1014	41.557	26.152	2.020	1.00	23.73
ATOM 1288 CG LYS 1014	41.146	25.474	0.748	1.00	23.57
ATOM 1289 CD LYS 1014	41.963	26.033	-0.354	1.00	26.38
ATOM 1290 CE LYS 1014	41.172	25.978	-1.617	1.00	38.71
ATOM 1291 NZ LYS 1014	42.034	26.404	-2.776	1.00	50.36
ATOM 1295 C LYS 1014	43.105	26.678	3.823	1.00	11.16
ATOM 1296 O LYS 1014	44.066	27.452	3.818	1.00	13.85
ATOM 1297 N GLY 1015	42.210	26.590	4.816	1.00	10.82
ATOM 1299 CA GLY 1015	42.250	27.403	6.017	1.00	12.48
ATOM 1300 C GLY 1015	43.584	27.327	6.715	1.00	17.17
ATOM 1301 O GLY 1015	44.124	28.349	7.130	1.00	19.92
ATOM 1302 N MET 1016	44.159	26.128	6.763	1.00	17.82
ATOM 1304 CA MET 1016	45.426	25.927	7.439	1.00	15.78
ATOM 1305 CB MET 1016	45.516	24.488	7.925	1.00	17.77
ATOM 1306 CG MET 1016	44.538	24.156	9.057	1.00	15.19
ATOM 1307 SD MET 1016	44.931	24.991	10.623	1.00	15.49

00938872.111304







FIG. 7(28)

ATOM 1403 CE1 HIS 1026	42.428	26.085	16.424	1.00	26.31
ATOM 1404 NE2 HIS 1026	42.199	26.781	15.321	1.00	29.05
ATOM 1406 C HIS 1026	46.901	26.086	17.036	1.00	30.13
ATOM 1407 O HIS 1026	46.335	26.681	17.955	1.00	37.96
ATOM 1408 N ARG 1027	47.662	25.024	17.244	1.00	26.58
ATOM 1410 CA ARG 1027	47.872	24.429	18.583	1.00	31.87
ATOM 1411 CB ARG 1027	48.235	25.483	19.666	1.00	20.17
ATOM 1412 C ARG 1027	46.762	23.449	19.055	1.00	31.55
ATOM 1413 O ARG 1027	47.047	22.477	19.742	1.00	38.11
ATOM 1414 N ASP 1028	45.528	23.629	18.597	1.00	30.85
ATOM 1416 CA ASP 1028	44.466	22.698	18.955	1.00	26.34
ATOM 1417 CB ASP 1028	43.788	23.098	20.248	1.00	32.60
ATOM 1418 CG ASP 1028	42.847	22.020	20.755	1.00	35.64
ATOM 1419 OD1 ASP 1028	41.692	22.346	21.096	1.00	36.08
ATOM 1420 OD2 ASP 1028	43.267	20.842	20.790	1.00	40.39
ATOM 1421 C ASP 1028	43.435	22.565	17.841	1.00	26.23
ATOM 1422 O ASP 1028	42.276	22.926	17.998	1.00	23.40
ATOM 1423 N LEU 1029	43.884	22.034	16.708	1.00	24.88
ATOM 1425 CA LEU 1029	43.053	21.842	15.533	1.00	23.16
ATOM 1426 CB LEU 1029	43.958	21.772	14.299	1.00	18.78
ATOM 1427 CG LEU 1029	43.221	21.714	12.965	1.00	20.21
ATOM 1428 CD1 LEU 1029	42.349	22.952	12.812	1.00	15.13
ATOM 1429 CD2 LEU 1029	44.249	21.601	11.827	1.00	22.91
ATOM 1430 C LEU 1029	42.237	20.562	15.700	1.00	25.25
ATOM 1431 O LEU 1029	42.765	19.473	15.591	1.00	30.47
ATOM 1432 N ALA 1030	40.949	20.703	15.957	1.00	25.99
ATOM 1434 CA ALA 1030	40.062	19.574	16.182	1.00	25.19
ATOM 1435 CB ALA 1030	39.872	19.387	17.679	1.00	24.55
ATOM 1436 C ALA 1030	38.761	20.007	15.558	1.00	27.35
ATOM 1437 O ALA 1030	38.611	21.202	15.302	1.00	33.46
ATOM 1438 N ALA 1031	37.797	19.094	15.379	1.00	25.19
ATOM 1440 CA ALA 1031	36.508	19.451	14.752	1.00	22.16
ATOM 1441 CB ALA 1031	35.772	18.210	14.270	1.00	21.71
ATOM 1442 C ALA 1031	35.551	20.353	15.536	1.00	20.96
ATOM 1443 O ALA 1031	34.639	20.950	14.944	1.00	21.36
ATOM 1444 N ARG 1032	35.712	20.388	16.859	1.00	22.49
ATOM 1446 CA ARG 1032	34.898	21.246	17.736	1.00	27.01
ATOM 1447 CB ARG 1032	35.157	20.945	19.220	1.00	25.22
ATOM 1448 CG ARG 1032	36.534	21.451	19.707	1.00	34.44
ATOM 1449 CD ARG 1032	37.150	20.503	20.770	1.00	46.39

## FIG. 7(29)

ATOM 1450 NE ARG 1032	38.554	20.752	21.158	1.00	41.28
ATOM 1452 CZ ARG 1032	39.464	19.799	21.352	1.00	32.28
ATOM 1453 NH1 ARG 1032	40.677	20.129	21.709	1.00	27.74
ATOM 1456 NH2 ARG 1032	39.178	18.524	21.148	1.00	31.24
ATOM 1459 C ARG 1032	35.296	22.708	17.482	1.00	25.91
ATOM 1460 O ARG 1032	34.601	23.605	17.935	1.00	30.23
ATOM 1461 N ASN 1033	36.451	22.911	16.840	1.00	20.90
ATOM 1463 CA ASN 1033	37.008	24.222	16.495	1.00	15.77
ATOM 1464 CB ASN 1033	38.497	24.290	16.813	1.00	18.29
ATOM 1465 CG ASN 1033	38.760	24.160	18.254	1.00	20.60
ATOM 1466 OD1 ASN 1033	37.891	24.445	19.067	1.00	29.84
ATOM 1467 ND2 ASN 1033	39.929	23.677	18.601	1.00	18.08
ATOM 1470 C ASN 1033	36.839	24.535	15.019	1.00	19.29
ATOM 1471 O ASN 1033	37.619	25.303	14.450	1.00	17.18
ATOM 1472 N ILE 1034	35.934	23.822	14.366	1.00	17.56
ATOM 1474 CA ILE 1034	35.631	24.092	12.972	1.00	17.92
ATOM 1475 CB ILE 1034	35.813	22.868	12.091	1.00	15.66
ATOM 1476 CG2 ILE 1034	35.364	23.192	10.647	1.00	12.61
ATOM 1477 CG1 ILE 1034	37.247	22.349	12.221	1.00	10.08
ATOM 1478 CD1 ILE 1034	38.312	23.384	11.994	1.00	18.10
ATOM 1479 C ILE 1034	34.147	24.381	13.075	1.00	21.87
ATOM 1480 O ILE 1034	33.410	23.592	13.669	1.00	26.72
ATOM 1481 N LEU 1035	33.711	25.524	12.575	1.00	21.91
ATOM 1483 CA LEU 1035	32.311	25.883	12.670	1.00	19.45
ATOM 1484 CB LEU 1035	32.190	27.310	13.181	1.00	18.73
ATOM 1485 CG LEU 1035	32.102	27.454	14.691	1.00	21.53
ATOM 1486 CD1 LEU 1035	33.019	26.518	15.456	1.00	8.66
ATOM 1487 CD2 LEU 1035	32.391	28.881	15.016	1.00	19.34
ATOM 1488 C LEU 1035	31.700	25.764	11.316	1.00	20.15
ATOM 1489 O LEU 1035	32.377	25.977	10.310	1.00	21.51
ATOM 1490 N LEU 1036	30.429	25.390	11.275	1.00	24.13
ATOM 1492 CA LEU 1036	29.745	25.237	10.006	1.00	26.96
ATOM 1493 CB LEU 1036	29.027	23.882	9.909	1.00	20.57
ATOM 1494 CG LEU 1036	28.149	23.631	8.681	1.00	17.23
ATOM 1495 CD1 LEU 1036	28.877	23.617	7.360	1.00	7.53
ATOM 1496 CD2 LEU 1036	27.566	22.306	8.900	1.00	18.85
ATOM 1497 C LEU 1036	28.827	26.432	9.755	1.00	31.45
ATOM 1498 O LEU 1036	27.953	26.794	10.557	1.00	29.93
ATOM 1499 N SER 1037	29.094	27.061	8.628	1.00	34.52
ATOM 1501 CA SER 1037	28.410	28.248	8.215	1.00	37.11

00939332-111371

FIG. 7(30)

ATOM 1502 CB SER 1037	29.448	29.220	7.632	1.00	41.11
ATOM 1503 OG SER 1037	28.879	30.439	7.193	1.00	44.80
ATOM 1505 C SER 1037	27.367	27.890	7.209	1.00	39.39
ATOM 1506 O SER 1037	27.045	26.735	7.024	1.00	42.14
ATOM 1507 N GLU 1038	26.884	28.912	6.531	1.00	44.94
ATOM 1509 CA GLU 1038	25.845	28.806	5.534	1.00	50.37
ATOM 1510 CB GLU 1038	25.685	30.152	4.792	1.00	56.15
ATOM 1511 CG GLU 1038	25.599	31.391	5.676	1.00	55.19
ATOM 1512 CD GLU 1038	24.518	31.270	6.708	1.00	59.42
ATOM 1513 OE1 GLU 1038	23.464	30.637	6.419	1.00	58.62
ATOM 1514 OE2 GLU 1038	24.736	31.806	7.816	1.00	63.52
ATOM 1515 C GLU 1038	25.954	27.672	4.518	1.00	51.35
ATOM 1516 O GLU 1038	25.619	26.521	4.816	1.00	57.04
ATOM 1517 N LYS 1039	26.414	27.997	3.317	1.00	46.28
ATOM 1519 CA LYS 1039	26.467	27.021	2.251	1.00	43.05
ATOM 1520 CB LYS 1039	26.455	27.729	0.898	1.00	41.05
ATOM 1521 C LYS 1039	27.689	26.155	2.401	1.00	44.31
ATOM 1522 O LYS 1039	28.687	26.358	1.697	1.00	50.06
ATOM 1523 N ASN 1040	27.611	25.210	3.339	1.00	37.02
ATOM 1525 CA ASN 1040	28.701	24.283	3.630	1.00	32.65
ATOM 1526 CB ASN 1040	28.647	23.041	2.761	1.00	31.69
ATOM 1527 CG ASN 1040	27.641	22.061	3.267	1.00	31.29
ATOM 1528 OD1 ASN 1040	26.740	21.693	2.553	1.00	38.80
ATOM 1529 ND2 ASN 1040	27.749	21.680	4.530	1.00	36.05
ATOM 1532 C ASN 1040	30.096	24.844	3.656	1.00	28.45
ATOM 1533 O ASN 1040	31.079	24.162	3.300	1.00	26.00
ATOM 1534 N VAL 1041	30.174	26.101	4.073	1.00	23.77
ATOM 1536 CA VAL 1041	31.447	26.739	4.207	1.00	16.56
ATOM 1537 CB VAL 1041	31.382	28.274	3.940	1.00	16.16
ATOM 1538 CG1 VAL 1041	32.709	28.948	4.315	1.00	8.57
ATOM 1539 CG2 VAL 1041	31.124	28.509	2.470	1.00	6.79
ATOM 1540 C VAL 1041	31.726	26.382	5.646	1.00	15.50
ATOM 1541 O VAL 1041	30.825	26.333	6.485	1.00	9.73
ATOM 1542 N VAL 1042	32.967	26.022	5.883	1.00	18.82
ATOM 1544 CA VAL 1042	33.431	25.607	7.185	1.00	19.76
ATOM 1545 CB VAL 1042	33.907	24.110	7.051	1.00	22.19
ATOM 1546 CG1 VAL 1042	35.439	23.993	7.041	1.00	18.66
ATOM 1547 CG2 VAL 1042	33.247	23.242	8.100	1.00	22.95
ATOM 1548 C VAL 1042	34.580	26.607	7.483	1.00	20.50
ATOM 1549 O VAL 1042	35.348	26.960	6.575	1.00	17.75

00000000 111101



FIG. 7(32)

ATOM 1598 C PHE 1047	44.681	31.163	15.426	1.00	67.78
ATOM 1599 O PHE 1047	44.507	32.345	15.797	1.00	63.26
ATOM 1601 CB ASP 1064	29.579	17.003	25.123	1.00	69.86
ATOM 1602 CG ASP 1064	30.534	16.464	24.050	1.00	69.93
ATOM 1603 OD1 ASP 1064	31.028	15.321	24.179	1.00	71.35
ATOM 1604 OD2 ASP 1064	30.776	17.189	23.063	1.00	71.45
ATOM 1605 C ASP 1064	31.511	17.821	26.539	1.00	64.90
ATOM 1606 O ASP 1064	31.512	19.029	26.788	1.00	64.09
ATOM 1609 N ASP 1064	29.229	17.550	27.534	1.00	67.30
ATOM 1611 CA ASP 1064	30.204	17.019	26.533	1.00	67.58
ATOM 1612 N ALA 1065	32.617	17.135	26.278	1.00	61.87
ATOM 1614 CA ALA 1065	33.932	17.759	26.244	1.00	58.06
ATOM 1615 CB ALA 1065	34.479	17.935	27.650	1.00	56.61
ATOM 1616 C ALA 1065	34.888	16.915	25.397	1.00	57.97
ATOM 1617 O ALA 1065	34.491	15.906	24.788	1.00	56.86
ATOM 1618 N ARG 1066	36.155	17.313	25.400	1.00	54.64
ATOM 1620 CA ARG 1066	37.182	16.664	24.607	1.00	50.99
ATOM 1621 CB ARG 1066	37.538	17.539	23.393	1.00	49.53
ATOM 1622 CG ARG 1066	36.459	17.608	22.335	1.00	52.76
ATOM 1623 CD ARG 1066	36.866	16.805	21.125	1.00	57.63
ATOM 1624 NE ARG 1066	35.847	16.645	20.093	1.00	57.02
ATOM 1626 CZ ARG 1066	35.976	17.033	18.824	1.00	55.63
ATOM 1627 NH1 ARG 1066	34.984	16.797	17.995	1.00	57.63
ATOM 1630 NH2 ARG 1066	37.046	17.691	18.385	1.00	40.52
ATOM 1633 C ARG 1066	38.428	16.513	25.427	1.00	49.01
ATOM 1634 O ARG 1066	38.652	17.274	26.364	1.00	46.29
ATOM 1635 N LEU 1067	39.251	15.546	25.041	1.00	46.48
ATOM 1637 CA LEU 1067	40.510	15.320	25.709	1.00	45.62
ATOM 1638 CB LEU 1067	40.703	13.840	26.073	1.00	45.53
ATOM 1639 CG LEU 1067	41.335	13.519	27.441	1.00	44.07
ATOM 1640 CD1 LEU 1067	42.236	12.322	27.273	1.00	37.52
ATOM 1641 CD2 LEU 1067	42.109	14.710	28.057	1.00	39.60
ATOM 1642 C LEU 1067	41.530	15.778	24.677	1.00	42.00
ATOM 1643 O LEU 1067	41.983	15.010	23.832	1.00	41.05
ATOM 1644 N PRO 1068	41.854	17.072	24.698	1.00	41.22
ATOM 1645 CD PRO 1068	41.265	18.104	25.584	1.00	34.16
ATOM 1646 CA PRO 1068	42.817	17.661	23.761	1.00	38.41
ATOM 1647 CB PRO 1068	42.919	19.104	24.277	1.00	36.08
ATOM 1648 CG PRO 1068	41.496	19.355	24.828	1.00	29.23
ATOM 1649 C PRO 1068	44.197	16.961	23.571	1.00	35.36

00000000 111701

## FIG. 7(33)

ATOM 1650 O PRO 1068	44.932	17.258	22.623	1.00	37.80
ATOM 1651 N LEU 1069	44.552	16.040	24.455	1.00	33.98
ATOM 1653 CA LEU 1069	45.829	15.337	24.333	1.00	35.06
ATOM 1654 CB LEU 1069	46.092	14.517	25.601	1.00	37.80
ATOM 1655 CG LEU 1069	47.228	13.497	25.488	1.00	40.67
ATOM 1656 CD1 LEU 1069	48.599	14.156	25.752	1.00	36.35
ATOM 1657 CD2 LEU 1069	46.939	12.333	26.445	1.00	40.75
ATOM 1658 C LEU 1069	45.776	14.397	23.121	1.00	34.16
ATOM 1659 O LEU 1069	46.787	14.115	22.461	1.00	32.14
ATOM 1660 N LYS 1070	44.571	13.916	22.859	1.00	28.95
ATOM 1662 CA LYS 1070	44.280	13.014	21.765	1.00	28.17
ATOM 1663 CB LYS 1070	42.828	12.569	21.911	1.00	22.17
ATOM 1664 CG LYS 1070	42.553	11.730	23.144	1.00	22.02
ATOM 1665 CD LYS 1070	41.085	11.317	23.107	1.00	24.17
ATOM 1666 CE LYS 1070	40.851	9.908	23.646	1.00	29.35
ATOM 1667 NZ LYS 1070	39.444	9.436	23.439	1.00	35.82
ATOM 1671 C LYS 1070	44.518	13.582	20.340	1.00	29.26
ATOM 1672 O LYS 1070	44.368	12.867	19.344	1.00	27.81
ATOM 1673 N TRP 1071	44.862	14.865	20.260	1.00	27.00
ATOM 1675 CA TRP 1071	45.086	15.550	18.995	1.00	27.37
ATOM 1676 CB TRP 1071	44.191	16.827	18.882	1.00	20.67
ATOM 1677 CG TRP 1071	42.724	16.551	18.545	1.00	20.12
ATOM 1678 CD2 TRP 1071	41.685	16.138	19.451	1.00	17.97
ATOM 1679 CE2 TRP 1071	40.524	15.892	18.675	1.00	13.02
ATOM 1680 CE3 TRP 1071	41.628	15.944	20.838	1.00	23.76
ATOM 1681 CD1 TRP 1071	42.153	16.560	17.304	1.00	19.50
ATOM 1682 NE1 TRP 1071	40.834	16.155	17.373	1.00	13.62
ATOM 1684 CZ2 TRP 1071	39.342	15.465	19.233	1.00	16.22
ATOM 1685 CZ3 TRP 1071	40.439	15.511	21.396	1.00	20.67
ATOM 1686 CH2 TRP 1071	39.321	15.273	20.594	1.00	19.47
ATOM 1687 C TRP 1071	46.523	15.961	18.889	1.00	26.26
ATOM 1688 O TRP 1071	46.948	16.465	17.842	1.00	28.70
ATOM 1689 N MET 1072	47.278	15.713	19.959	1.00	24.85
ATOM 1691 CA MET 1072	48.676	16.119	20.034	1.00	22.67
ATOM 1692 CB MET 1072	49.066	16.317	21.487	1.00	31.30
ATOM 1693 CG MET 1072	48.328	17.416	22.229	1.00	34.64
ATOM 1694 SD MET 1072	48.977	17.610	23.948	1.00	35.65
ATOM 1695 CE MET 1072	50.667	17.842	23.669	1.00	27.97
ATOM 1696 C MET 1072	49.697	15.215	19.388	1.00	25.43
ATOM 1697 O MET 1072	49.798	14.029	19.729	1.00	21.51

09939832.11301

FIG. 7(34)

ATOM 1698 N ALA 1073	50.545	15.800	18.547	1.00	25.55
ATOM 1700 CA ALA 1073	51.571	15.024	17.874	1.00	29.80
ATOM 1701 CB ALA 1073	52.369	15.912	16.958	1.00	22.65
ATOM 1702 C ALA 1073	52.448	14.453	18.989	1.00	34.88
ATOM 1703 O ALA 1073	52.431	14.970	20.115	1.00	39.38
ATOM 1704 N PRO 1074	53.183	13.355	18.724	1.00	36.01
ATOM 1705 CD PRO 1074	53.087	12.450	17.570	1.00	31.55
ATOM 1706 CA PRO 1074	54.040	12.771	19.769	1.00	36.24
ATOM 1707 CB PRO 1074	54.544	11.485	19.115	1.00	34.34
ATOM 1708 CG PRO 1074	53.415	11.137	18.193	1.00	31.88
ATOM 1709 C PRO 1074	55.189	13.670	20.288	1.00	37.13
ATOM 1710 O PRO 1074	55.570	13.575	21.447	1.00	34.58
ATOM 1711 N GLU 1075	55.746	14.533	19.440	1.00	37.40
ATOM 1713 CA GLU 1075	56.813	15.422	19.884	1.00	40.62
ATOM 1714 CB GLU 1075	57.598	15.990	18.707	1.00	33.55
ATOM 1715 CG GLU 1075	56.853	16.957	17.844	1.00	39.40
ATOM 1716 CD GLU 1075	55.952	16.300	16.828	1.00	43.14
ATOM 1717 OE1 GLU 1075	55.965	15.055	16.720	1.00	49.09
ATOM 1718 OE2 GLU 1075	55.228	17.040	16.124	1.00	44.63
ATOM 1719 C GLU 1075	56.239	16.546	20.757	1.00	42.73
ATOM 1720 O GLU 1075	56.903	17.061	21.639	1.00	44.76
ATOM 1721 N THR 1076	54.982	16.888	20.524	1.00	46.13
ATOM 1723 CA THR 1076	54.304	17.923	21.283	1.00	46.22
ATOM 1724 CB THR 1076	52.991	18.319	20.605	1.00	43.95
ATOM 1725 OG1 THR 1076	53.245	18.666	19.230	1.00	46.46
ATOM 1727 CG2 THR 1076	52.361	19.481	21.334	1.00	43.93
ATOM 1728 C THR 1076	53.991	17.378	22.662	1.00	47.62
ATOM 1729 O THR 1076	54.175	18.057	23.650	1.00	52.45
ATOM 1730 N ILE 1077	53.442	16.173	22.717	1.00	47.96
ATOM 1732 CA ILE 1077	53.123	15.528	23.980	1.00	46.99
ATOM 1733 CB ILE 1077	52.496	14.151	23.720	1.00	46.43
ATOM 1734 CG2 ILE 1077	52.691	13.232	24.895	1.00	46.16
ATOM 1735 CG1 ILE 1077	51.024	14.306	23.384	1.00	44.29
ATOM 1736 CD1 ILE 1077	50.336	13.010	23.163	1.00	46.43
ATOM 1737 C ILE 1077	54.418	15.345	24.767	1.00	51.37
ATOM 1738 O ILE 1077	54.473	15.577	25.974	1.00	52.53
ATOM 1739 N PHE 1078	55.458	14.931	24.058	1.00	53.41
ATOM 1741 CA PHE 1078	56.750	14.696	24.672	1.00	58.94
ATOM 1742 CB PHE 1078	57.506	13.570	23.925	1.00	60.74
ATOM 1743 CG PHE 1078	56.901	12.184	24.124	1.00	57.84



FIG. 7(35)

ATOM	1744	CD1 PHE	1078	56.068	11.612	23.169	1.00	54.09
ATOM	1745	CD2 PHE	1078	57.127	11.483	25.298	1.00	58.64
ATOM	1746	CE1 PHE	1078	55.478	10.380	23.381	1.00	53.82
ATOM	1747	CE2 PHE	1078	56.539	10.254	25.514	1.00	57.20
ATOM	1748	CZ PHE	1078	55.711	9.703	24.555	1.00	55.07
ATOM	1749	C PHE	1078	57.574	15.981	24.767	1.00	63.98
ATOM	1750	O PHE	1078	57.433	16.738	25.736	1.00	67.06
ATOM	1751	N ASP	1079	58.356	16.274	23.724	1.00	66.97
ATOM	1753	CA ASP	1079	59.215	17.472	23.678	1.00	68.09
ATOM	1754	CB ASP	1079	60.225	17.402	22.501	1.00	66.89
ATOM	1755	CG ASP	1079	60.174	16.082	21.714	1.00	69.02
ATOM	1756	OD1 ASP	1079	60.254	16.156	20.474	1.00	71.23
ATOM	1757	OD2 ASP	1079	60.089	14.980	22.308	1.00	69.71
ATOM	1758	C ASP	1079	58.434	18.806	23.599	1.00	67.74
ATOM	1759	O ASP	1079	59.011	19.848	23.266	1.00	66.85
ATOM	1760	N ARG	1080	57.137	18.747	23.926	1.00	68.20
ATOM	1762	CA ARG	1080	56.173	19.858	23.898	1.00	66.60
ATOM	1763	CB ARG	1080	55.997	20.496	25.279	1.00	67.64
ATOM	1764	CG ARG	1080	54.529	20.758	25.638	1.00	71.26
ATOM	1765	CD ARG	1080	53.823	19.481	26.096	1.00	73.66
ATOM	1766	NE ARG	1080	52.364	19.610	26.226	1.00	75.75
ATOM	1768	CZ ARG	1080	51.642	18.981	27.157	1.00	74.86
ATOM	1769	NH1 ARG	1080	50.321	19.134	27.211	1.00	69.96
ATOM	1772	NH2 ARG	1080	52.247	18.212	28.060	1.00	72.78
ATOM	1775	C ARG	1080	56.305	20.920	22.801	1.00	63.93
ATOM	1776	O ARG	1080	55.861	22.069	22.955	1.00	61.93
ATOM	1777	N VAL	1081	56.863	20.510	21.667	1.00	61.30
ATOM	1779	CA VAL	1081	57.034	21.413	20.545	1.00	58.53
ATOM	1780	CB VAL	1081	58.202	20.951	19.584	1.00	60.54
ATOM	1781	CG1 VAL	1081	59.304	20.266	20.370	1.00	62.35
ATOM	1782	CG2 VAL	1081	57.701	20.043	18.455	1.00	55.04
ATOM	1783	C VAL	1081	55.713	21.481	19.771	1.00	56.90
ATOM	1784	O VAL	1081	55.052	20.452	19.560	1.00	57.43
ATOM	1785	N TYR	1082	55.287	22.699	19.435	1.00	51.51
ATOM	1787	CA TYR	1082	54.078	22.909	18.641	1.00	41.08
ATOM	1788	CB TYR	1082	53.092	23.847	19.332	1.00	37.59
ATOM	1789	CG TYR	1082	52.275	23.238	20.442	1.00	32.41
ATOM	1790	CD1 TYR	1082	52.800	23.135	21.721	1.00	38.13
ATOM	1791	CE1 TYR	1082	52.043	22.663	22.781	1.00	38.73
ATOM	1792	CD2 TYR	1082	50.961	22.843	20.234	1.00	27.91

00000000 11111111





FIG. 7(38)

ATOM 1889 O PHE 1091	43.147	16.077	10.334	1.00	15.79
ATOM 1890 N GLY 1092	45.258	15.408	10.812	1.00	19.49
ATOM 1892 CA GLY 1092	45.042	13.988	10.577	1.00	18.11
ATOM 1893 C GLY 1092	44.029	13.429	11.544	1.00	19.35
ATOM 1894 O GLY 1092	43.235	12.581	11.137	1.00	24.23
ATOM 1895 N VAL 1093	44.073	13.836	12.819	1.00	18.53
ATOM 1897 CA VAL 1093	43.055	13.392	13.788	1.00	20.09
ATOM 1898 CB VAL 1093	43.389	13.752	15.298	1.00	15.18
ATOM 1899 CG1 VAL 1093	42.421	13.051	16.187	1.00	17.08
ATOM 1900 CG2 VAL 1093	44.778	13.310	15.698	1.00	11.27
ATOM 1901 C VAL 1093	41.661	13.971	13.376	1.00	22.42
ATOM 1902 O VAL 1093	40.649	13.253	13.396	1.00	26.19
ATOM 1903 N LEU 1094	41.618	15.235	12.938	1.00	23.95
ATOM 1905 CA LEU 1094	40.363	15.893	12.484	1.00	19.63
ATOM 1906 CB LEU 1094	40.667	17.338	12.050	1.00	25.24
ATOM 1907 CG LEU 1094	39.587	18.420	11.974	1.00	27.30
ATOM 1908 CD1 LEU 1094	40.136	19.497	11.113	1.00	28.26
ATOM 1909 CD2 LEU 1094	38.265	17.929	11.385	1.00	27.54
ATOM 1910 C LEU 1094	39.775	15.146	11.280	1.00	16.12
ATOM 1911 O LEU 1094	38.555	15.002	11.129	1.00	16.14
ATOM 1912 N LEU 1095	40.631	14.766	10.348	1.00	16.30
ATOM 1914 CA LEU 1095	40.155	14.003	9.195	1.00	17.98
ATOM 1915 CB LEU 1095	41.321	13.538	8.317	1.00	16.52
ATOM 1916 CG LEU 1095	41.981	14.536	7.386	1.00	14.88
ATOM 1917 CD1 LEU 1095	42.807	13.734	6.399	1.00	11.81
ATOM 1918 CD2 LEU 1095	40.931	15.401	6.639	1.00	21.08
ATOM 1919 C LEU 1095	39.437	12.770	9.722	1.00	17.52
ATOM 1920 O LEU 1095	38.324	12.448	9.270	1.00	16.23
ATOM 1921 N TRP 1096	40.077	12.105	10.697	1.00	14.50
ATOM 1923 CA TRP 1096	39.509	10.916	11.304	1.00	14.02
ATOM 1924 CB TRP 1096	40.452	10.330	12.337	1.00	13.21
ATOM 1925 CG TRP 1096	40.010	8.992	12.850	1.00	18.93
ATOM 1926 CD2 TRP 1096	39.016	8.732	13.856	1.00	24.77
ATOM 1927 CE2 TRP 1096	38.952	7.319	14.020	1.00	27.07
ATOM 1928 CE3 TRP 1096	38.178	9.546	14.647	1.00	29.39
ATOM 1929 CD1 TRP 1096	40.483	7.781	12.460	1.00	21.28
ATOM 1930 NE1 TRP 1096	39.854	6.770	13.154	1.00	18.61
ATOM 1932 CZ2 TRP 1096	38.075	6.700	14.954	1.00	28.21
ATOM 1933 CZ3 TRP 1096	37.303	8.927	15.581	1.00	29.42
ATOM 1934 CH2 TRP 1096	37.266	7.511	15.719	1.00	27.60

09930372 111304



FIG. 7(40)

ATOM	1981	CD1 LEU	1101	28.060	9.866	9.127	1.00	22.23
ATOM	1982	CD2 LEU	1101	29.632	11.768	8.829	1.00	32.30
ATOM	1983	C LEU	1101	30.771	11.779	12.888	1.00	26.64
ATOM	1984	O LEU	1101	29.793	11.552	13.580	1.00	31.34
ATOM	1985	N GLY	1102	31.828	12.446	13.336	1.00	24.93
ATOM	1987	CA GLY	1102	31.836	13.057	14.650	1.00	28.61
ATOM	1988	C GLY	1102	32.129	12.293	15.917	1.00	32.38
ATOM	1989	O GLY	1102	31.647	12.693	16.950	1.00	35.69
ATOM	1990	N ALA	1103	33.004	11.291	15.876	1.00	35.95
ATOM	1992	CA ALA	1103	33.354	10.500	17.060	1.00	31.27
ATOM	1993	CB ALA	1103	33.515	9.041	16.672	1.00	36.15
ATOM	1994	C ALA	1103	34.625	10.972	17.747	1.00	34.29
ATOM	1995	O ALA	1103	35.382	11.788	17.190	1.00	36.92
ATOM	1996	N SER	1104	34.886	10.417	18.934	1.00	33.11
ATOM	1998	CA SER	1104	36.087	10.744	19.715	1.00	35.13
ATOM	1999	CB SER	1104	35.906	10.422	21.207	1.00	38.40
ATOM	2000	OG SER	1104	34.719	10.964	21.765	1.00	50.36
ATOM	2002	C SER	1104	37.216	9.852	19.249	1.00	34.54
ATOM	2003	O SER	1104	37.039	8.640	19.167	1.00	33.44
ATOM	2004	N PRO	1105	38.395	10.434	18.963	1.00	32.93
ATOM	2005	CD PRO	1105	38.678	11.877	18.972	1.00	31.54
ATOM	2006	CA PRO	1105	39.571	9.693	18.513	1.00	29.88
ATOM	2007	CB PRO	1105	40.633	10.781	18.465	1.00	22.24
ATOM	2008	CG PRO	1105	39.883	11.965	18.079	1.00	28.04
ATOM	2009	C PRO	1105	39.919	8.659	19.582	1.00	32.54
ATOM	2010	O PRO	1105	39.480	8.795	20.731	1.00	28.79
ATOM	2011	N TYR	1106	40.700	7.648	19.196	1.00	34.52
ATOM	2013	CA TYR	1106	41.148	6.564	20.085	1.00	39.62
ATOM	2014	CB TYR	1106	42.374	6.994	20.896	1.00	37.66
ATOM	2015	CG TYR	1106	43.496	7.566	20.059	1.00	39.50
ATOM	2016	CD1 TYR	1106	43.690	8.957	19.976	1.00	37.50
ATOM	2017	CE1 TYR	1106	44.655	9.518	19.143	1.00	35.61
ATOM	2018	CD2 TYR	1106	44.315	6.739	19.293	1.00	34.54
ATOM	2019	CE2 TYR	1106	45.305	7.290	18.446	1.00	38.80
ATOM	2020	CZ TYR	1106	45.466	8.686	18.373	1.00	38.23
ATOM	2021	OH TYR	1106	46.412	9.240	17.520	1.00	31.37
ATOM	2023	C TYR	1106	40.022	6.128	21.016	1.00	47.24
ATOM	2024	O TYR	1106	40.100	6.296	22.247	1.00	46.94
ATOM	2025	N PRO	1107	38.947	5.570	20.431	1.00	52.30
ATOM	2026	CD PRO	1107	38.880	5.234	18.996	1.00	52.76

PDB-2E86E660

## FIG. 7(41)

ATOM	2027	CA	PRO	1107	37.750	5.088	21.125	1.00	55.67
ATOM	2028	CB	PRO	1107	37.078	4.223	20.066	1.00	55.09
ATOM	2029	CG	PRO	1107	37.420	4.931	18.797	1.00	52.62
ATOM	2030	C	PRO	1107	38.035	4.300	22.408	1.00	60.55
ATOM	2031	O	PRO	1107	38.668	3.231	22.377	1.00	60.88
ATOM	2032	N	GLY	1108	37.631	4.894	23.533	1.00	62.85
ATOM	2034	CA	GLY	1108	37.790	4.284	24.845	1.00	63.10
ATOM	2035	C	GLY	1108	39.171	3.783	25.228	1.00	61.44
ATOM	2036	O	GLY	1108	39.319	3.010	26.178	1.00	63.49
ATOM	2037	N	VAL	1109	40.181	4.228	24.498	1.00	58.31
ATOM	2039	CA	VAL	1109	41.548	3.835	24.766	1.00	55.54
ATOM	2040	CB	VAL	1109	42.430	4.181	23.580	1.00	54.11
ATOM	2041	CG1	VAL	1109	43.857	3.787	23.857	1.00	51.33
ATOM	2042	CG2	VAL	1109	41.875	3.528	22.306	1.00	54.09
ATOM	2043	C	VAL	1109	42.006	4.657	25.949	1.00	57.04
ATOM	2044	O	VAL	1109	41.492	5.749	26.163	1.00	57.18
ATOM	2045	N	LYS	1110	42.969	4.140	26.711	1.00	59.43
ATOM	2047	CA	LYS	1110	43.497	4.849	27.880	1.00	60.27
ATOM	2048	CB	LYS	1110	43.928	3.842	28.936	1.00	63.70
ATOM	2049	C	LYS	1110	44.664	5.796	27.538	1.00	60.52
ATOM	2050	O	LYS	1110	45.570	5.410	26.780	1.00	61.06
ATOM	2051	N	ILE	1111	44.665	7.006	28.115	1.00	58.79
ATOM	2053	CA	ILE	1111	45.732	7.987	27.859	1.00	60.01
ATOM	2054	CB	ILE	1111	45.236	9.441	27.886	1.00	63.41
ATOM	2055	CG2	ILE	1111	44.517	9.798	26.596	1.00	58.31
ATOM	2056	CG1	ILE	1111	44.413	9.688	29.145	1.00	69.87
ATOM	2057	CD1	ILE	1111	44.341	11.144	29.528	1.00	75.64
ATOM	2058	C	ILE	1111	46.949	7.891	28.781	1.00	58.91
ATOM	2059	O	ILE	1111	47.670	8.862	28.992	1.00	59.56
ATOM	2060	N	ASP	1112	47.187	6.697	29.299	1.00	60.43
ATOM	2062	CA	ASP	1112	48.312	6.407	30.173	1.00	56.25
ATOM	2063	CB	ASP	1112	48.318	4.919	30.421	1.00	59.88
ATOM	2064	CG	ASP	1112	48.273	4.131	29.122	1.00	67.87
ATOM	2065	OD1	ASP	1112	47.179	3.893	28.564	1.00	71.34
ATOM	2066	OD2	ASP	1112	49.348	3.765	28.628	1.00	72.11
ATOM	2067	C	ASP	1112	49.612	6.795	29.489	1.00	54.37
ATOM	2068	O	ASP	1112	49.634	7.066	28.284	1.00	50.67
ATOM	2069	N	GLU	1113	50.710	6.741	30.236	1.00	55.36
ATOM	2071	CA	GLU	1113	52.024	7.089	29.683	1.00	55.99
ATOM	2072	CB	GLU	1113	53.051	7.374	30.806	1.00	58.69

00996632 111701

FIG. 7(42)

ATOM	2073	C	GLU	1113	52.552	6.015	28.726	1.00	54.42
ATOM	2074	O	GLU	1113	53.624	6.175	28.126	1.00	51.91
ATOM	2075	N	GLU	1114	51.822	4.903	28.627	1.00	51.54
ATOM	2077	CA	GLU	1114	52.192	3.819	27.719	1.00	54.36
ATOM	2078	CB	GLU	1114	51.873	2.452	28.322	1.00	56.43
ATOM	2079	CG	GLU	1114	53.072	1.749	28.948	1.00	63.29
ATOM	2080	CD	GLU	1114	53.996	2.661	29.772	1.00	67.36
ATOM	2081	OE1	GLU	1114	55.153	2.870	29.329	1.00	67.34
ATOM	2082	OE2	GLU	1114	53.590	3.127	30.873	1.00	68.20
ATOM	2083	C	GLU	1114	51.440	4.031	26.412	1.00	52.22
ATOM	2084	O	GLU	1114	51.830	3.514	25.360	1.00	51.74
ATOM	2085	N	PHE	1115	50.383	4.840	26.486	1.00	49.67
ATOM	2087	CA	PHE	1115	49.603	5.175	25.320	1.00	44.59
ATOM	2088	CB	PHE	1115	48.400	6.013	25.688	1.00	44.73
ATOM	2089	CG	PHE	1115	47.918	6.890	24.579	1.00	49.93
ATOM	2090	CD1	PHE	1115	48.140	8.270	24.621	1.00	50.02
ATOM	2091	CD2	PHE	1115	47.251	6.344	23.477	1.00	53.38
ATOM	2092	CE1	PHE	1115	47.704	9.098	23.577	1.00	52.88
ATOM	2093	CE2	PHE	1115	46.805	7.158	22.425	1.00	51.00
ATOM	2094	CZ	PHE	1115	47.033	8.535	22.474	1.00	54.64
ATOM	2095	C	PHE	1115	50.582	5.981	24.507	1.00	46.08
ATOM	2096	O	PHE	1115	50.929	5.572	23.402	1.00	47.48
ATOM	2097	N	CYS	1116	51.127	7.047	25.101	1.00	43.91
ATOM	2099	CA	CYS	1116	52.109	7.898	24.404	1.00	45.79
ATOM	2100	CB	CYS	1116	52.473	9.113	25.247	1.00	44.47
ATOM	2101	SG	CYS	1116	51.129	9.723	26.295	1.00	64.10
ATOM	2102	C	CYS	1116	53.392	7.140	24.019	1.00	46.03
ATOM	2103	O	CYS	1116	54.232	7.667	23.279	1.00	46.86
ATOM	2104	N	ARG	1117	53.536	5.911	24.529	1.00	44.91
ATOM	2106	CA	ARG	1117	54.688	5.069	24.237	1.00	41.89
ATOM	2107	CB	ARG	1117	54.882	4.001	25.308	1.00	43.78
ATOM	2108	CG	ARG	1117	56.237	3.298	25.233	1.00	45.19
ATOM	2109	CD	ARG	1117	56.189	1.905	25.856	1.00	47.09
ATOM	2110	NE	ARG	1117	55.490	0.922	25.021	1.00	49.55
ATOM	2112	CZ	ARG	1117	54.329	0.337	25.336	1.00	51.59
ATOM	2113	NH1	ARG	1117	53.783	-0.547	24.506	1.00	51.49
ATOM	2116	NH2	ARG	1117	53.695	0.649	26.461	1.00	47.17
ATOM	2119	C	ARG	1117	54.370	4.389	22.927	1.00	38.98
ATOM	2120	O	ARG	1117	55.156	4.455	21.996	1.00	42.49
ATOM	2121	N	ARG	1118	53.206	3.751	22.860	1.00	35.52





FIG. 7(44)

ATOM	2175	N	THR	1123	51.918	2.946	16.860	1.00	16.84
ATOM	2177	CA	THR	1123	50.535	2.502	16.989	1.00	22.17
ATOM	2178	CB	THR	1123	50.209	2.144	18.469	1.00	29.75
ATOM	2179	OG1	THR	1123	51.148	1.174	18.971	1.00	31.60
ATOM	2181	CG2	THR	1123	48.794	1.587	18.591	1.00	31.44
ATOM	2182	C	THR	1123	49.653	3.673	16.453	1.00	23.74
ATOM	2183	O	THR	1123	49.940	4.850	16.721	1.00	18.73
ATOM	2184	N	ARG	1124	48.597	3.354	15.701	1.00	22.93
ATOM	2186	CA	ARG	1124	47.735	4.379	15.125	1.00	17.39
ATOM	2187	CB	ARG	1124	48.094	4.680	13.670	1.00	17.70
ATOM	2188	CG	ARG	1124	49.478	5.192	13.406	1.00	14.57
ATOM	2189	CD	ARG	1124	49.713	6.484	14.040	1.00	14.31
ATOM	2190	NE	ARG	1124	51.046	6.935	13.684	1.00	10.98
ATOM	2192	CZ	ARG	1124	52.067	6.988	14.533	1.00	16.02
ATOM	2193	NH1	ARG	1124	51.861	6.604	15.775	1.00	10.96
ATOM	2196	NH2	ARG	1124	53.269	7.468	14.163	1.00	8.74
ATOM	2199	C	ARG	1124	46.317	3.893	15.096	1.00	16.31
ATOM	2200	O	ARG	1124	46.085	2.698	15.022	1.00	20.38
ATOM	2201	N	MET	1125	45.380	4.847	15.081	1.00	21.15
ATOM	2203	CA	MET	1125	43.943	4.570	15.023	1.00	23.81
ATOM	2204	CB	MET	1125	43.158	5.870	15.012	1.00	16.88
ATOM	2205	CG	MET	1125	42.783	6.397	16.380	1.00	17.08
ATOM	2206	SD	MET	1125	41.656	7.825	16.270	1.00	25.19
ATOM	2207	CE	MET	1125	42.908	9.123	15.776	1.00	17.02
ATOM	2208	C	MET	1125	43.604	3.789	13.749	1.00	29.80
ATOM	2209	O	MET	1125	44.298	3.923	12.748	1.00	33.37
ATOM	2210	N	ARG	1126	42.576	2.953	13.806	1.00	36.07
ATOM	2212	CA	ARG	1126	42.116	2.183	12.668	1.00	36.36
ATOM	2213	CB	ARG	1126	41.465	0.859	13.154	1.00	40.10
ATOM	2214	CG	ARG	1126	40.257	1.021	14.061	1.00	54.46
ATOM	2215	CD	ARG	1126	38.956	1.268	13.263	1.00	65.08
ATOM	2216	NE	ARG	1126	37.839	1.758	14.091	1.00	72.39
ATOM	2218	CZ	ARG	1126	36.545	1.753	13.740	1.00	74.53
ATOM	2219	NH1	ARG	1126	35.636	2.233	14.588	1.00	78.72
ATOM	2222	NH2	ARG	1126	36.140	1.267	12.562	1.00	74.28
ATOM	2225	C	ARG	1126	41.124	3.094	11.888	1.00	32.52
ATOM	2226	O	ARG	1126	40.706	4.117	12.380	1.00	34.88
ATOM	2227	N	ALA	1127	40.760	2.725	10.676	1.00	29.80
ATOM	2229	CA	ALA	1127	39.888	3.508	9.812	1.00	29.83
ATOM	2230	CB	ALA	1127	39.743	2.782	8.460	1.00	32.24



## FIG. 7(46)

ATOM	2278	CG2 THR	1132	38.528	7.126	-0.161	1.00	32.09
ATOM	2279	C THR	1132	39.064	5.634	2.159	1.00	31.18
ATOM	2280	O THR	1132	39.678	6.088	3.149	1.00	37.35
ATOM	2281	N PRO	1133	39.543	4.601	1.439	1.00	29.49
ATOM	2282	CD PRO	1133	38.884	3.875	0.336	1.00	28.18
ATOM	2283	CA PRO	1133	40.876	4.065	1.686	1.00	23.60
ATOM	2284	CB PRO	1133	41.029	2.998	0.604	1.00	29.05
ATOM	2285	CG PRO	1133	39.640	2.581	0.319	1.00	28.36
ATOM	2286	C PRO	1133	41.917	5.122	1.500	1.00	22.87
ATOM	2287	O PRO	1133	42.944	5.119	2.182	1.00	30.07
ATOM	2288	N GLU	1134	41.700	5.983	0.511	1.00	18.80
ATOM	2290	CA GLU	1134	42.656	7.049	0.264	1.00	22.21
ATOM	2291	CB GLU	1134	42.594	7.573	-1.160	1.00	26.28
ATOM	2292	CG GLU	1134	41.214	7.564	-1.765	1.00	40.23
ATOM	2293	CD GLU	1134	40.901	6.347	-2.617	1.00	42.05
ATOM	2294	OE1 GLU	1134	41.727	6.004	-3.504	1.00	44.65
ATOM	2295	OE2 GLU	1134	39.799	5.779	-2.453	1.00	44.07
ATOM	2296	C GLU	1134	42.547	8.164	1.300	1.00	21.07
ATOM	2297	O GLU	1134	43.528	8.877	1.543	1.00	20.78
ATOM	2298	N MET	1135	41.375	8.304	1.940	1.00	20.24
ATOM	2300	CA MET	1135	41.233	9.304	2.996	1.00	16.52
ATOM	2301	CB MET	1135	39.775	9.658	3.319	1.00	17.57
ATOM	2302	CG MET	1135	39.158	10.807	2.420	1.00	15.02
ATOM	2303	SD MET	1135	40.199	12.320	2.187	1.00	20.17
ATOM	2304	CE MET	1135	40.632	12.648	3.877	1.00	13.20
ATOM	2305	C MET	1135	41.974	8.751	4.191	1.00	20.41
ATOM	2306	O MET	1135	42.772	9.461	4.787	1.00	25.79
ATOM	2307	N TYR	1136	41.836	7.448	4.445	1.00	20.30
ATOM	2309	CA TYR	1136	42.565	6.817	5.540	1.00	17.65
ATOM	2310	CB TYR	1136	42.082	5.394	5.832	1.00	21.89
ATOM	2311	CG TYR	1136	42.786	4.775	7.041	1.00	26.17
ATOM	2312	CD1 TYR	1136	42.702	5.353	8.325	1.00	20.81
ATOM	2313	CE1 TYR	1136	43.364	4.781	9.427	1.00	17.33
ATOM	2314	CD2 TYR	1136	43.554	3.612	6.900	1.00	26.03
ATOM	2315	CE2 TYR	1136	44.225	3.034	7.998	1.00	12.75
ATOM	2316	CZ TYR	1136	44.124	3.615	9.245	1.00	16.64
ATOM	2317	OH TYR	1136	44.791	2.999	10.281	1.00	17.57
ATOM	2319	C TYR	1136	44.077	6.847	5.267	1.00	14.28
ATOM	2320	O TYR	1136	44.892	7.066	6.179	1.00	19.62
ATOM	2321	N GLN	1137	44.479	6.693	4.022	1.00	12.55

05036622-111304

FIG. 7(47)

ATOM 2323	CA GLN 1137	45.903	6.777	3.758	1.00	16.34
ATOM 2324	CB GLN 1137	46.218	6.412	2.325	1.00	18.36
ATOM 2325	CG GLN 1137	47.702	6.654	1.945	1.00	21.79
ATOM 2326	CD GLN 1137	48.613	5.655	2.561	1.00	14.21
ATOM 2327	OE1 GLN 1137	48.416	4.469	2.381	1.00	22.64
ATOM 2328	NE2 GLN 1137	49.571	6.111	3.344	1.00	18.97
ATOM 2331	C GLN 1137	46.415	8.193	4.041	1.00	20.40
ATOM 2332	O GLN 1137	47.598	8.378	4.391	1.00	25.11
ATOM 2333	N THR 1138	45.564	9.194	3.807	1.00	18.65
ATOM 2335	CA THR 1138	45.939	10.568	4.068	1.00	15.52
ATOM 2336	CB THR 1138	44.921	11.507	3.538	1.00	19.97
ATOM 2337	OG1 THR 1138	44.797	11.257	2.144	1.00	18.74
ATOM 2339	CG2 THR 1138	45.381	12.939	3.722	1.00	21.70
ATOM 2340	C THR 1138	46.111	10.721	5.566	1.00	12.73
ATOM 2341	O THR 1138	47.067	11.344	6.010	1.00	18.83
ATOM 2342	N MET 1139	45.233	10.118	6.352	1.00	9.32
ATOM 2344	CA MET 1139	45.402	10.151	7.809	1.00	12.25
ATOM 2345	CB MET 1139	44.295	9.349	8.480	1.00	13.21
ATOM 2346	CG MET 1139	42.967	10.007	8.354	1.00	5.60
ATOM 2347	SD MET 1139	41.708	8.982	9.003	1.00	17.66
ATOM 2348	CE MET 1139	40.510	9.337	7.925	1.00	2.00
ATOM 2349	C MET 1139	46.773	9.567	8.198	1.00	15.96
ATOM 2350	O MET 1139	47.573	10.237	8.855	1.00	17.30
ATOM 2351	N LEU 1140	47.058	8.333	7.770	1.00	15.29
ATOM 2353	CA LEU 1140	48.357	7.735	8.081	1.00	14.20
ATOM 2354	CB LEU 1140	48.542	6.409	7.326	1.00	6.27
ATOM 2355	CG LEU 1140	47.511	5.373	7.745	1.00	15.42
ATOM 2356	CD1 LEU 1140	47.656	4.103	6.927	1.00	8.64
ATOM 2357	CD2 LEU 1140	47.648	5.103	9.246	1.00	14.99
ATOM 2358	C LEU 1140	49.518	8.684	7.751	1.00	17.20
ATOM 2359	O LEU 1140	50.552	8.691	8.442	1.00	18.73
ATOM 2360	N ASP 1141	49.396	9.413	6.644	1.00	20.16
ATOM 2362	CA ASP 1141	50.442	10.374	6.229	1.00	19.52
ATOM 2363	CB ASP 1141	50.139	10.963	4.851	1.00	20.89
ATOM 2364	CG ASP 1141	50.228	9.942	3.772	1.00	25.01
ATOM 2365	OD1 ASP 1141	50.537	8.765	4.074	1.00	30.17
ATOM 2366	OD2 ASP 1141	49.994	10.321	2.624	1.00	26.42
ATOM 2367	C ASP 1141	50.627	11.521	7.207	1.00	15.10
ATOM 2368	O ASP 1141	51.762	11.905	7.502	1.00	8.73
ATOM 2369	N CYS 1142	49.504	12.101	7.637	1.00	10.75

09938837-111701



FIG. 7(49)

ATOM 2418 C GLU 1146	57.910	13.742	11.052	1.00	36.46
ATOM 2419 O GLU 1146	57.378	13.665	9.934	1.00	35.72
ATOM 2420 N PRO 1147	57.861	14.868	11.791	1.00	34.09
ATOM 2421 CD PRO 1147	58.490	15.147	13.099	1.00	33.72
ATOM 2422 CA PRO 1147	57.082	16.020	11.336	1.00	29.77
ATOM 2423 CB PRO 1147	57.446	17.106	12.351	1.00	27.86
ATOM 2424 CG PRO 1147	57.668	16.334	13.619	1.00	26.72
ATOM 2425 C PRO 1147	57.436	16.417	9.922	1.00	27.04
ATOM 2426 O PRO 1147	56.559	16.784	9.158	1.00	30.21
ATOM 2427 N SER 1148	58.698	16.255	9.551	1.00	22.56
ATOM 2429 CA SER 1148	59.177	16.616	8.210	1.00	24.23
ATOM 2430 CB SER 1148	60.707	16.724	8.203	1.00	27.40
ATOM 2431 OG SER 1148	61.314	15.477	8.545	1.00	36.19
ATOM 2433 C SER 1148	58.743	15.674	7.101	1.00	21.41
ATOM 2434 O SER 1148	58.890	15.964	5.913	1.00	24.41
ATOM 2435 N GLN 1149	58.272	14.508	7.485	1.00	25.45
ATOM 2437 CA GLN 1149	57.831	13.547	6.497	1.00	26.28
ATOM 2438 CB GLN 1149	58.224	12.142	6.946	1.00	32.79
ATOM 2439 CG GLN 1149	59.705	11.907	6.958	1.00	25.96
ATOM 2440 CD GLN 1149	60.279	12.196	5.622	1.00	32.77
ATOM 2441 OE1 GLN 1149	59.765	11.744	4.591	1.00	36.63
ATOM 2442 NE2 GLN 1149	61.312	13.007	5.604	1.00	37.86
ATOM 2445 C GLN 1149	56.327	13.670	6.278	1.00	23.40
ATOM 2446 O GLN 1149	55.783	13.145	5.306	1.00	23.12
ATOM 2447 N ARG 1150	55.662	14.339	7.215	1.00	22.72
ATOM 2449 CA ARG 1150	54.226	14.581	7.132	1.00	17.86
ATOM 2450 CB ARG 1150	53.721	15.243	8.392	1.00	16.38
ATOM 2451 CG ARG 1150	54.161	14.532	9.598	1.00	13.96
ATOM 2452 CD ARG 1150	53.285	14.903	10.728	1.00	15.08
ATOM 2453 NE ARG 1150	53.632	14.090	11.879	1.00	24.55
ATOM 2455 CZ ARG 1150	54.066	14.564	13.040	1.00	27.63
ATOM 2456 NH1 ARG 1150	54.192	15.871	13.230	1.00	27.18
ATOM 2459 NH2 ARG 1150	54.423	13.717	13.991	1.00	29.34
ATOM 2462 C ARG 1150	54.025	15.559	6.008	1.00	16.82
ATOM 2463 O ARG 1150	54.913	16.382	5.715	1.00	13.09
ATOM 2464 N PRO 1151	52.873	15.464	5.320	1.00	18.01
ATOM 2465 CD PRO 1151	51.793	14.453	5.320	1.00	6.32
ATOM 2466 CA PRO 1151	52.726	16.442	4.240	1.00	18.95
ATOM 2467 CB PRO 1151	51.489	15.948	3.492	1.00	16.01
ATOM 2468 CG PRO 1151	50.726	15.092	4.520	1.00	10.59

FIG. 7(50)

ATOM 2469 C PRO 1151	52.574	17.861	4.805	1.00	18.27
ATOM 2470 O PRO 1151	52.422	18.039	6.006	1.00	19.70
ATOM 2471 N THR 1152	52.763	18.860	3.958	1.00	19.16
ATOM 2473 CA THR 1152	52.604	20.251	4.366	1.00	14.92
ATOM 2474 CB THR 1152	53.511	21.138	3.560	1.00	13.80
ATOM 2475 OG1 THR 1152	53.146	21.080	2.163	1.00	17.02
ATOM 2477 CG2 THR 1152	54.918	20.697	3.764	1.00	5.40
ATOM 2478 C THR 1152	51.196	20.571	3.979	1.00	13.16
ATOM 2479 O THR 1152	50.682	19.905	3.084	1.00	19.18
ATOM 2480 N PHE 1153	50.561	21.572	4.599	1.00	14.62
ATOM 2482 CA PHE 1153	49.176	21.910	4.224	1.00	12.87
ATOM 2483 CB PHE 1153	48.588	23.023	5.083	1.00	11.95
ATOM 2484 CG PHE 1153	48.157	22.558	6.422	1.00	9.67
ATOM 2485 CD1 PHE 1153	47.037	21.740	6.560	1.00	14.91
ATOM 2486 CD2 PHE 1153	48.891	22.857	7.533	1.00	15.01
ATOM 2487 CE1 PHE 1153	46.660	21.215	7.802	1.00	9.44
ATOM 2488 CE2 PHE 1153	48.529	22.340	8.789	1.00	13.43
ATOM 2489 CZ PHE 1153	47.405	21.513	8.913	1.00	8.41
ATOM 2490 C PHE 1153	49.073	22.253	2.750	1.00	16.98
ATOM 2491 O PHE 1153	48.078	21.927	2.114	1.00	21.60
ATOM 2492 N SER 1154	50.116	22.841	2.168	1.00	15.39
ATOM 2494 CA SER 1154	50.031	23.123	0.754	1.00	17.55
ATOM 2495 CB SER 1154	51.251	23.868	0.254	1.00	25.28
ATOM 2496 OG SER 1154	51.244	25.190	0.776	1.00	33.35
ATOM 2498 C SER 1154	49.850	21.815	0.022	1.00	20.26
ATOM 2499 O SER 1154	48.932	21.704	-0.798	1.00	23.74
ATOM 2500 N GLU 1155	50.670	20.808	0.347	1.00	19.47
ATOM 2502 CA GLU 1155	50.534	19.493	-0.307	1.00	16.55
ATOM 2503 CB GLU 1155	51.588	18.513	0.188	1.00	19.82
ATOM 2504 CG GLU 1155	52.932	18.773	-0.486	1.00	20.20
ATOM 2505 CD GLU 1155	54.128	18.210	0.249	1.00	23.11
ATOM 2506 OE1 GLU 1155	55.226	18.377	-0.312	1.00	35.76
ATOM 2507 OE2 GLU 1155	54.009	17.631	1.359	1.00	21.09
ATOM 2508 C GLU 1155	49.153	18.918	-0.107	1.00	16.59
ATOM 2509 O GLU 1155	48.548	18.414	-1.055	1.00	21.37
ATOM 2510 N LEU 1156	48.619	19.034	1.101	1.00	16.01
ATOM 2512 CA LEU 1156	47.272	18.532	1.375	1.00	18.06
ATOM 2513 CB LEU 1156	46.969	18.521	2.875	1.00	15.74
ATOM 2514 CG LEU 1156	47.688	17.493	3.759	1.00	11.35
ATOM 2515 CD1 LEU 1156	47.786	18.049	5.201	1.00	2.08

00939327-114301





FIG. 7(52)

ATOM	2563	O	GLY	1161	40.295	17.526	-5.971	1.00	23.05
ATOM	2564	N	ASN	1162	42.439	16.997	-5.520	1.00	21.49
ATOM	2566	CA	ASN	1162	42.428	15.854	-6.428	1.00	22.31
ATOM	2567	CB	ASN	1162	43.771	15.109	-6.427	1.00	22.34
ATOM	2568	CG	ASN	1162	44.904	15.888	-7.062	1.00	20.03
ATOM	2569	OD1	ASN	1162	44.705	16.903	-7.701	1.00	28.17
ATOM	2570	ND2	ASN	1162	46.117	15.401	-6.873	1.00	32.22
ATOM	2573	C	ASN	1162	41.356	14.851	-5.969	1.00	23.05
ATOM	2574	O	ASN	1162	40.570	14.378	-6.769	1.00	26.11
ATOM	2575	N	LEU	1163	41.360	14.490	-4.688	1.00	21.05
ATOM	2577	CA	LEU	1163	40.405	13.523	-4.166	1.00	19.91
ATOM	2578	CB	LEU	1163	40.695	13.172	-2.689	1.00	19.18
ATOM	2579	CG	LEU	1163	41.675	12.042	-2.275	1.00	18.62
ATOM	2580	CD1	LEU	1163	42.959	12.120	-3.020	1.00	24.35
ATOM	2581	CD2	LEU	1163	41.983	12.043	-0.804	1.00	14.82
ATOM	2582	C	LEU	1163	39.015	14.038	-4.331	1.00	19.71
ATOM	2583	O	LEU	1163	38.110	13.318	-4.767	1.00	23.11
ATOM	2584	N	LEU	1164	38.860	15.328	-4.121	1.00	25.91
ATOM	2586	CA	LEU	1164	37.533	15.941	-4.226	1.00	29.28
ATOM	2587	CB	LEU	1164	37.603	17.388	-3.726	1.00	31.25
ATOM	2588	CG	LEU	1164	36.348	18.176	-3.371	1.00	25.75
ATOM	2589	CD1	LEU	1164	35.429	17.396	-2.435	1.00	31.52
ATOM	2590	CD2	LEU	1164	7.018	15.866	-5.653	1.00	30.07
ATOM	2592	O	LEU	1164	35.953	15.330	-5.903	1.00	32.61
ATOM	2593	N	GLN	1165	37.810	16.344	-6.598	1.00	33.76
ATOM	2595	CA	GLN	1165	37.423	16.317	-8.003	1.00	39.95
ATOM	2596	CB	GLN	1165	38.451	17.048	-8.855	1.00	46.90
ATOM	2597	CG	GLN	1165	38.758	18.474	-8.480	1.00	49.81
ATOM	2598	CD	GLN	1165	39.874	19.024	-9.348	1.00	56.23
ATOM	2599	OE1	GLN	1165	41.056	18.945	-8.997	1.00	55.97
ATOM	2600	NE2	GLN	1165	39.508	19.536	-10.518	1.00	60.66
ATOM	2603	C	GLN	1165	37.304	14.898	-8.554	1.00	39.33
ATOM	2604	O	GLN	1165	36.652	14.685	-9.568	1.00	42.09
ATOM	2605	N	ALA	1166	38.059	13.965	-7.988	1.00	36.82
ATOM	2607	CA	ALA	1166	37.994	12.586	-8.441	1.00	34.66
ATOM	2608	CB	ALA	1166	39.096	11.748	-7.814	1.00	32.78
ATOM	2609	C	ALA	1166	36.640	12.103	-7.991	1.00	36.63
ATOM	2610	O	ALA	1166	35.969	11.381	-8.713	1.00	39.47
ATOM	2611	N	ASN	1167	36.226	12.532	-6.800	1.00	40.01
ATOM	2613	CA	ASN	1167	34.911	12.158	-6.264	1.00	42.40

0093937 1 11311

FIG. 7(53)

ATOM	2614	CB	ASN	1167	34.641	12.878	-4.919	1.00	42.99
ATOM	2615	CG	ASN	1167	33.354	12.409	-4.242	1.00	40.80
ATOM	2616	OD1	ASN	1167	32.306	13.046	-4.348	1.00	40.18
ATOM	2617	ND2	ASN	1167	33.436	11.294	-3.532	1.00	36.58
ATOM	2620	C	ASN	1167	33.822	12.498	-7.299	1.00	41.88
ATOM	2621	O	ASN	1167	32.837	11.789	-7.391	1.00	41.83
ATOM	2622	N	ALA	1168	34.057	13.558	-8.085	1.00	45.09
ATOM	2624	CA	ALA	1168	33.187	14.065	-9.160	1.00	46.02
ATOM	2625	CB	ALA	1168	32.507	12.933	-9.929	1.00	45.92
ATOM	2626	C	ALA	1168	32.181	15.123	-8.728	1.00	48.61
ATOM	2628	O	ALA	1168	32.627	16.233	-8.363	1.00	50.20
ATOM	2629	O	HOH	1	46.858	21.496	16.690	1.00	23.54
ATOM	2632	O	HOH	2	49.904	21.605	17.271	1.00	36.65
ATOM	2635	O	HOH	3	49.682	18.133	17.657	1.00	50.47
ATOM	2638	O	HOH	4	56.606	19.394	15.202	1.00	25.28
ATOM	2641	O	HOH	5	57.215	21.949	11.395	1.00	37.66
ATOM	2644	O	HOH	6	56.082	25.850	12.933	1.00	34.63
ATOM	2647	O	HOH	7	52.355	23.016	6.377	1.00	21.45
ATOM	2650	O	HOH	8	51.153	27.376	4.088	1.00	29.93
ATOM	2653	O	HOH	9	44.820	28.454	1.120	1.00	16.47
ATOM	2656	O	HOH	10	46.377	38.321	5.198	1.00	31.93
ATOM	2659	O	HOH	11	43.987	38.133	3.129	1.00	52.41
ATOM	2662	O	HOH	12	53.321	40.451	6.702	1.00	31.88
ATOM	2665	O	HOH	13	44.977	49.530	8.305	1.00	44.56
ATOM	2668	O	HOH	14	44.379	43.338	7.798	1.00	31.72
ATOM	2671	O	HOH	15	39.477	40.232	8.468	1.00	36.65
ATOM	2674	O	HOH	16	41.987	36.751	10.646	1.00	23.26
ATOM	2677	O	HOH	17	41.711	41.873	6.802	1.00	34.79
ATOM	2680	O	HOH	18	29.514	24.656	18.739	1.00	31.43
ATOM	2683	O	HOH	19	27.493	22.351	15.517	1.00	42.03
ATOM	2686	O	HOH	20	24.345	20.097	15.325	1.00	24.92
ATOM	2689	O	HOH	21	32.381	18.452	20.520	1.00	75.12
ATOM	2692	O	HOH	22	31.071	8.282	19.507	1.00	31.68
ATOM	2695	O	HOH	23	33.001	7.742	21.598	1.00	38.67
ATOM	2698	O	HOH	24	34.802	6.439	18.667	1.00	34.24
ATOM	2701	O	HOH	25	32.273	6.932	14.174	1.00	41.21
ATOM	2704	O	HOH	26	34.059	5.245	12.870	1.00	49.30
ATOM	2707	O	HOH	27	38.059	3.432	4.799	1.00	63.69
ATOM	2710	O	HOH	28	41.089	1.841	4.421	1.00	42.86
ATOM	2713	O	HOH	29	45.081	9.234	-0.557	1.00	39.97

0099977 111 2866660

FIG. 7(54)

ATOM	2716	O	HOH	30	47.301	11.215	1.271	1.00	58.47
ATOM	2719	O	HOH	31	50.046	14.055	0.168	1.00	37.58
ATOM	2722	O	HOH	32	54.425	8.937	4.821	1.00	36.74
ATOM	2725	O	HOH	33	52.279	7.099	5.152	1.00	13.04
ATOM	2728	O	HOH	34	53.025	7.510	7.740	1.00	25.53
ATOM	2731	O	HOH	35	50.852	6.818	10.462	1.00	18.29
ATOM	2734	O	HOH	36	46.448	7.762	15.254	1.00	9.08
ATOM	2737	O	HOH	37	47.326	3.930	20.460	1.00	34.16
ATOM	2740	O	HOH	38	48.264	12.367	20.804	1.00	22.14
ATOM	2743	O	HOH	39	44.276	8.193	24.312	1.00	40.52
ATOM	2746	O	HOH	40	37.491	11.237	25.975	1.00	38.71
ATOM	2749	O	HOH	41	37.592	13.565	23.164	1.00	44.55
ATOM	2752	O	HOH	42	34.887	12.418	26.235	1.00	50.96
ATOM	2755	O	HOH	43	24.823	15.933	17.377	1.00	33.72
ATOM	2758	O	HOH	44	23.302	7.532	7.049	1.00	57.56
ATOM	2761	O	HOH	45	29.954	11.864	-3.109	1.00	38.05
ATOM	2764	O	HOH	46	42.099	3.812	18.044	1.00	40.12
ATOM	2767	O	HOH	47	38.653	0.737	18.003	1.00	37.30
ATOM	2770	O	HOH	48	34.169	14.465	16.707	1.00	20.01
ATOM	2773	O	HOH	49	37.055	32.622	16.570	1.00	31.20
ATOM	2776	O	HOH	50	29.361	31.729	15.460	1.00	21.90
ATOM	2779	O	HOH	51	25.866	31.495	10.192	1.00	24.50
ATOM	2782	O	HOH	52	23.411	32.276	10.616	1.00	68.85
ATOM	2785	O	HOH	53	22.135	37.404	8.648	1.00	40.22
ATOM	2788	O	HOH	54	28.356	36.997	10.747	1.00	22.41
ATOM	2791	O	HOH	55	29.650	33.190	8.897	1.00	31.98
ATOM	2794	O	HOH	56	34.801	35.904	3.297	1.00	59.73
ATOM	2797	O	HOH	57	24.341	20.715	4.934	1.00	28.10
ATOM	2800	O	HOH	58	37.439	20.236	25.832	1.00	33.07
ATOM	2803	O	HOH	59	32.675	51.977	19.122	1.00	33.52
ATOM	2806	O	HOH	60	32.722	54.003	14.118	1.00	25.01
ATOM	2809	O	HOH	61	29.691	54.769	22.004	1.00	27.32
ATOM	2812	O	HOH	62	21.347	47.577	14.711	1.00	27.85
ATOM	2815	O	HOH	63	25.640	44.257	7.516	1.00	24.71
ATOM	2818	O	HOH	64	24.686	40.916	3.785	1.00	55.13
ATOM	2821	O	HOH	65	33.825	48.721	10.105	1.00	39.11
ATOM	2824	O	HOH	66	39.855	54.415	18.247	1.00	50.97
ATOM	2827	O	HOH	67	36.001	50.053	7.081	1.00	68.99
ATOM	2830	O	HOH	68	37.973	50.651	5.331	1.00	32.12
ATOM	2833	O	HOH	69	40.220	53.227	6.506	1.00	15.02

PDETT\* 28866660

FIG. 7(55)

ATOM	2836	O	HOH	70	42.258	51.833	6.993	1.00	21.05
ATOM	2839	O	HOH	71	36.813	55.217	13.035	1.00	46.29
ATOM	2842	O	HOH	72	37.030	55.879	15.712	1.00	39.36
ATOM	2845	O	HOH	73	23.054	45.061	23.607	1.00	51.11
ATOM	2848	O	HOH	74	27.075	54.516	6.971	1.00	51.66
ATOM	2851	O	HOH	75	21.634	54.039	13.651	1.00	36.36
ATOM	2854	O	HOH	76	45.158	47.529	30.699	1.00	56.11
ATOM	2857	O	HOH	77	44.469	45.246	36.699	1.00	36.50
ATOM	2860	O	HOH	78	45.882	41.717	36.085	1.00	28.57
ATOM	2863	O	HOH	79	49.406	41.527	34.292	1.00	65.94
ATOM	2866	O	HOH	80	36.134	49.719	26.101	1.00	63.80
ATOM	2869	O	HOH	81	26.884	28.564	16.554	1.00	49.20
ATOM	2872	O	HOH	82	22.079	10.131	13.444	1.00	56.45
ATOM	2875	O	HOH	83	41.225	4.655	30.464	1.00	58.98
ATOM	2878	O	HOH	84	47.309	1.568	10.326	1.00	21.69
ATOM	2881	O	HOH	85	56.613	18.335	6.527	1.00	33.97
ATOM	2884	O	HOH	86	56.196	16.855	3.275	1.00	47.24
ATOM	2887	O	HOH	87	54.826	22.813	0.598	1.00	33.50
ATOM	2890	O	HOH	88	52.962	21.915	-2.351	1.00	66.62
ATOM	2893	O	HOH	89	47.896	24.242	-3.714	1.00	40.99
ATOM	2896	O	HOH	90	40.295	22.360	25.551	1.00	39.81
ATOM	2899	O	HOH	91	40.188	3.202	15.661	1.00	45.97
ATOM	2902	O	HOH	92	45.159	2.965	19.553	1.00	44.25
ATOM	2905	O	HOH	93	36.591	7.772	23.374	1.00	68.23
ATOM	2908	O	HOH	94	34.274	5.197	22.878	1.00	51.62
ATOM	2911	O	HOH	95	41.935	7.033	29.073	1.00	63.23
ATOM	2914	O	HOH	96	20.731	12.105	14.716	1.00	54.80
ATOM	2917	O	HOH	97	23.147	13.682	17.882	1.00	50.81
ATOM	2920	O	HOH	98	35.515	9.509	-3.558	1.00	56.70
ATOM	2923	O	HOH	99	38.933	9.503	-1.231	1.00	32.18
ATOM	2926	O	HOH	100	51.814	24.438	3.703	1.00	52.00
ATOM	2929	O	HOH	101	51.670	28.690	0.838	1.00	42.41
ATOM	2932	O	HOH	102	46.536	30.610	1.750	1.00	45.80
ATOM	2935	O	HOH	103	45.165	34.214	0.818	1.00	46.46
ATOM	2938	O	HOH	104	42.695	35.194	1.055	1.00	25.82
ATOM	2941	O	HOH	105	39.689	33.418	0.723	1.00	31.99
ATOM	2944	O	HOH	106	23.962	38.119	27.549	1.00	47.89
ATOM	2947	O	HOH	107	25.343	40.908	27.379	1.00	54.09
ATOM	2950	O	HOH	108	20.307	35.738	19.866	1.00	32.61
ATOM	2953	O	HOH	109	28.085	54.303	18.810	1.00	61.58

09939832.111371

FIG. 7(56)

ATOM	2956	O	HOH	110	29.849	56.131	16.966	1.00	37.29
ATOM	2959	O	HOH	111	31.503	58.023	14.735	1.00	46.45
ATOM	2962	O	HOH	112	35.212	55.981	10.499	1.00	92.07
ATOM	2965	O	HOH	113	36.530	55.812	6.656	1.00	30.72
ATOM	2968	O	HOH	114	50.045	41.251	26.059	1.00	82.26
ATOM	2971	O	HOH	115	25.153	36.460	9.054	1.00	50.86
ATOM	2974	O	HOH	116	31.749	32.705	15.359	1.00	30.04
ATOM	2977	O	HOH	117	30.213	3.806	4.940	1.00	39.74
ATOM	2980	O	HOH	118	36.511	1.159	7.275	1.00	41.62
ATOM	2983	O	HOH	119	27.155	4.637	5.224	1.00	79.92
ATOM	2986	O	HOH	120	57.319	11.287	3.459	1.00	33.02
ATOM	2989	O	HOH	121	52.121	12.483	1.755	1.00	45.55
ATOM	2992	O	HOH	122	47.613	14.088	-5.021	1.00	41.01
ATOM	2995	O	HOH	123	57.550	26.628	16.551	1.00	30.62
ATOM	2998	O	HOH	124	32.338	10.125	23.559	1.00	35.48
ATOM	3001	O	HOH	125	31.065	5.698	3.273	1.00	42.74
ATOM	3004	O	HOH	126	32.603	4.523	1.410	1.00	33.30
ATOM	3007	O	HOH	127	34.394	2.617	4.702	1.00	42.12
ATOM	3010	O	HOH	128	37.961	10.373	-4.287	1.00	47.57
ATOM	3013	O	HOH	129	42.215	11.947	-6.970	1.00	45.13
ATOM	3016	O	HOH	130	46.307	8.952	-4.280	1.00	70.02
ATOM	3019	O	HOH	131	50.369	17.388	-3.277	1.00	42.22
ATOM	3022	O	HOH	132	47.231	21.866	22.930	1.00	50.84
ATOM	3025	O	HOH	133	45.362	17.669	27.147	1.00	48.06
ATOM	3028	O	HOH	134	27.005	23.141	18.124	1.00	49.65
ATOM	3031	O	HOH	135	45.726	12.511	-6.453	1.00	45.31
ATOM	3034	O	HOH	136	46.998	11.755	18.088	1.00	37.38
ATOM	3037	O	HOH	137	39.706	37.699	9.894	1.00	40.71
ATOM	3040	O	HOH	138	18.768	48.678	17.798	1.00	74.62
ATOM	3043	O	HOH	139	43.641	47.080	26.762	1.00	44.64
ATOM	3046	O	HOH	140	32.593	53.980	16.744	1.00	43.95
ATOM	3049	O	HOH	141	34.726	55.568	14.399	1.00	45.86
ATOM	3052	O	HOH	142	30.551	53.227	19.638	1.00	35.99
ATOM	3055	O	HOH	143	26.370	55.161	14.300	1.00	33.09
ATOM	3058	O	HOH	144	24.547	55.803	6.815	1.00	58.70
ATOM	3061	O	HOH	145	36.217	52.574	3.221	1.00	68.48
ATOM	3064	O	HOH	146	39.065	54.455	4.595	1.00	48.85
ATOM	3067	O	HOH	147	45.130	40.725	5.433	1.00	62.58
ATOM	3070	O	HOH	148	33.453	43.988	7.386	1.00	41.59
ATOM	3073	O	HOH	149	36.626	45.045	6.144	1.00	54.04

0099937 1 11701

